

PATERSON,

NEW JERSEY.

Its Advantages for Manufacturing and Residence:
its Industries, Prominent Men, Banks,
Schools, Churches, etc.

BY CHARLES A. SHRINER.

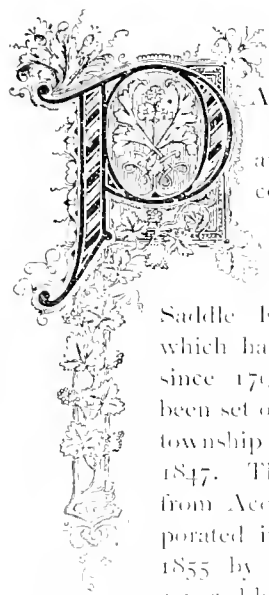
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Sketch of Passaic County.



PASSAIC COUNTY, N. J., was organized in 1837, in pursuance of an act of the legislature, and was composed of Acquackanonk, which had been a township since 1693, and belonged to Essex county; Manchester, which was taken from Saddle River, Bergen county; Pompton, which had been a part of Bergen county since 1797, and West Milford, which had been set off from Pompton in 1834. Wayne township was set off from Manchester in 1847. The township of Paterson was set off from Acquackanonk in 1831; it was incorporated in 1851 and enlarged in 1854 and 1855 by the addition of the territory now covered by the First and Second Wards; in 1869 a considerable portion of Little Falls and Acquackanonk townships was added to Paterson. In 1868 Little Falls was set off from Acquackanonk township. In 1860 Acquackanonk was reduced by the creation of the township of Passaic; the latter was incorporated as a village in 1871 and as a city in 1873. The county contains 109,734 acres, distributed among its civil divisions as follows:—Paterson, 5,357; Passaic, 800; Acquackanonk, 6,420; Little Falls, 3,251; Manchester, 6,122; Pompton, 27,715; Wayne, 15,700; West Milford, 41,399.

THE CITY OF PATERSON

is situated about sixteen miles from New York City. Its peculiar advantages for manufacturing were recognized in the latter part of the eighteenth century when Alexander Hamilton, Washington's first Secretary of the Treasury, and a number of associates conceived the project of erecting large industrial establishments in America. The war of the revolution had established the independence of this nation politically and the aim of Hamilton and his associates was to also establish its independence from a commercial and manufacturing point of view. They intended to establish a manufacturing centre in this country and for this purpose they and their agents

traveled over a great deal of territory and finally determined on Paterson as the best place for that purpose. The growth of Paterson and its vicinity and the rank Passaic county has assumed in the mercantile and manufacturing world have verified the judgment of Hamilton and his associates.

For the purpose of obtaining control of the territory needed an application was made to the legislature of New Jersey for a charter and this was granted in 1791 creating the Society for Establishing Useful Manufactures. William Paterson was Governor of New Jersey and the scene of the operations of the Society was named after him. Not only was the conformation of the ground in Paterson and its vicinity admirably adapted to manufacturing purposes but the Great Falls of the Passaic afforded a water power not equalled in any of the states in the eastern portion of the country. Several raceways were constructed from the falls, thus affording water power for manufacturing purposes. The Society built a cotton mill but shortly afterwards ceased operations as manufacturers and devoted itself to inducing private enterprise to locate on its property. Vast tracts of land had been acquired either by grant or purchase and this territory was divided into lots which were sold to manufacturers. Plots of ground were given to religious denominations for churches and cemeteries and under the fostering care of the Society Paterson grew into a flourishing city. For some time the manufacture of cotton was the most important industrial pursuit in the city, but this was soon followed by the location of iron works and in a short time iron had gained the upper hand of cotton. The next important industry established was that of silk. The originator of this industry was the late John Ryle, who had made Paterson his home and who found here peculiar facilities for the manufacture of textile fabrics. The excellent quality of the water of the Passaic river attracted a class of manufacturers to Paterson who could not be satisfied except in a place so beautifully supplied with natural advantages as they found this city to be. Thomas Rogers established the iron industry in Paterson and soon devoted himself to the manufacture of locomotives; nearly every iron industry in this part of the

country is in some way traceable to Mr. Rogers, just as the various silk manufacturing establishments owe their origin to the silk mill of John Ryle. These were the seeds that were sown on a fertile soil; manufactures increased at a rate never surpassed in any place and to-day Paterson's diversified and large industries are a sure guarantee of its stability and success.

One of the first railroads built in this country was from Jersey City to Paterson; another line was built from Paterson to Ramapo and another from Jersey City to Paterson by way of Newark. These three lines are now operated by the New York, Lake Erie & Western railroad company, under a perpetual lease, and the two former constitute a portion of the main line of the road. The New York, Susquehanna & Western railroad company, whose line passed through a suburban part of the city, recognizing the growing importance of Paterson, a number of years ago constructed a spur into the heart of the city in order to be on a footing equal to that of the Erie. In 1880 the Delaware, Lackawanna & Western railroad company, whose rails skirted the foot of Garret Mountain to the west of the city, also constructed a spur into the more populous portion of Paterson, materially increasing its business.

There is no place in the country where the scenery is more magnificent than it is in the neighborhood of Paterson. This fact, added to the accumulation of wealth by its residents who had been successful either in manufacturing or mercantile pursuits, attracted to Paterson a large number of residences. For a number of years a conservative spirit in the county board neglected the roads of the county but of late years a great deal of money has been spent in macadamizing roads which wind through the beautiful country surrounding. According to the laws as they stood a number of years ago each township looked out for its own roads, which meant in effect that farmers worked out their road tax. Few concerted efforts were made to improve the roads until the Board of Freeholders obtained the legislation necessary by which the board could take charge of such roads as they might see fit. The new departure was welcomed with delight by all who were interested in driving and every year's increased expenditure for road purposes added to the attractiveness of the county as a place of residence. The county has no bonded debt and a floating debt of only a few thousand dollars, so that the county taxes are little more than nominal.

Next in importance in Passaic County is the

CITY OF PASSAIC.

It is situated about eleven miles from New York city, at the present head of navigation of the Passaic, the project, undertaken by the United States government, of extending navigation as far as Paterson not having been completed as yet. Passaic has utilized the water of the Passaic river as a motive power for its industrial establishments by the erection by the Dundee Water Power and Land Company of a large dam in the Passaic river a short distance below Paterson, thus forming a large and beauti-

ful lake from which the company takes its name. The water is conveyed from the dam to Passaic by means of a canal and the result has been the clustering about the banks of this canal and along the river of numerous and important industries. Textile fabrics of nearly every kind are here manufactured. The New York, Lake Erie & Western railroad and the Delaware, Lackawanna & Western railroad lines pass through Passaic, and the New York, Susquehanna & Western railroad company has constructed a spur into the manufacturing portion of the city. On the slope of the hill which rises from the banks of the Passaic river are situated the residences of many of the wealthy merchants of New York and the city is every year increasing in importance both as a manufacturing place and for residences.

ACQUACKANONK

is a name closely identified with the history of Northern New Jersey. The territory once embraced under this name was vast and the deeds to the property come direct from Sir George Carteret and the Lords Proprietors of the province of East New Jersey. The principal settlements within the present borders of Acquackanonk township are the villages of Athenia and Clifton, the latter on the main line of the Erie railroad and the former on the Newark branch of the same road. Athenia has several manufacturing establishments, Clifton contains a number of residences of the wealthier class, a great many of the residents being business men of New York city. In Clifton some of the deeds given to the more desirable property provide that the premises shall be used only for residences and the class of buildings is provided for, thus ensuring uniformity and giving a guarantee of the class of residences. The rest of the township is devoted principally to agriculture and gardening, the soil being very rich and rendered more valuable on account of its proximity to the markets of New York.

THE TOWNSHIP OF WAYNE

is traversed by the Delaware, Lackawanna & Western and the New York & Greenwood Lake railroads. The principal settlement is the village of Pompton, which, on account of its beautiful location, is becoming a popular summer resort. There are in the township a number of brick yards, large powder mills, iron works, a silk mill and other industrial establishments. The rest of the township is devoted principally to agriculture.

MANCHESTER

Township adjoins the city of Paterson and has of late years been the scene of remarkable development and industrial activity. Cedar Cliff Park, romantically situated on the slope of the Preakness hill, was originally intended as sites for villas and elegant residences; a number of these were erected, but some years ago a large portion of the tract was thrown open for manufacturing pur-

poses, since which time several silk mills have been put up on the property.

LITTLE FALLS

Township contains a thriving village situated on the banks of the Passaic river. The village has clustered about the Little Falls of the Passaic, which furnish motive power to large textile fabrics manufacturing establishments. The Peckman river runs through a portion of the township and the water power furnished thereby has been utilized by other manufacturers. The township is also well known for the product of its brown stone quarries.

POMPTON

Township is noted for its mines and the historical recollections called forth by a number of its landmarks. The revolutionary army several times traversed the township on its way from West Point to Morristown and in the valley of Ringwood, where the iron mines of Cooper & Hewitt are located, still stands the building where Washington had his horses shod. The property at present be-

longs to Hon. Abram S. Hewitt, ex-Mayor of New York, who has erected there for himself a fine country house. Near this residence are the graves of Robert Erskine and his clerk; Erskine had the management of the iron mines for the London company but at the breaking out of the revolutionary war joined the American forces. He became intimate with General Washington and was made Geographer and Surveyor-General to the Army of the United States. The principal settlement in Pompton township is the village of Bloomingdale, on the New York, Susquehanna & Western railroad.

WEST MILFORD

Township comprises the upper part of Passaic County. It is principally devoted to agriculture. It has within its limits a number of pleasant lakes, of which the most prominent is Echo Lake. The lower half of Greenwood Lake, a popular summer resort, is also within the borders of this township. The principal settlements are Newfoundland, Charlotteburgh and the village of West Milford.

PASSAIC COUNTY GOVERNMENT.

Judge of Circuit Court—Jonathan Dixon.

President Judge of Court of Quarter Sessions and other county courts—John Hopper.

Lay Judges of Quarter Sessions and other county courts—James Inglis, Jr., John J. Warren.

Sheriff—Cornelius A. Cadmus.

Deputy Sheriff—Grant Cadmus.

Surrogate—Charles M. King.

County Clerk—William M. Smith.

Deputy County Clerk—Ross Williams.

Jail Warden—John F. Buckley.

County Physician—Walter B. Johnson.

County Counsel—Robert L. Hopper.

Superintendent of County Insane Asylum—Henry P. Ackerman.

Matron of County Insane Asylum—Mrs. Henry P. Ackerman.

BOARD OF FREEHOLDERS.

Paterson—

First Ward—Henry P. Ackerman.

Second Ward—Jacob H. Tittle.

Third Ward—John E. Foalks.

Fourth Ward—George G. Halstead (Director).

Fifth Ward—James Carroll.

Sixth Ward—John H. Morrow.

Seventh Ward—Thomas Howard.

Eighth Ward—Bernard Feeney.

Passaic—

First Ward—Thomas Giblin.

Second Ward—J. S. Biddell.

Third Ward—Albert Totten.

Fourth Ward—Sylvester J. Post.

Acquackanonk—George V. DeMott.

Little Falls—Francis J. Marley.

Manchester—John C. Roe.

Pompton—Josiah Ricker.

Wayne—

West Milford—William Patterson.

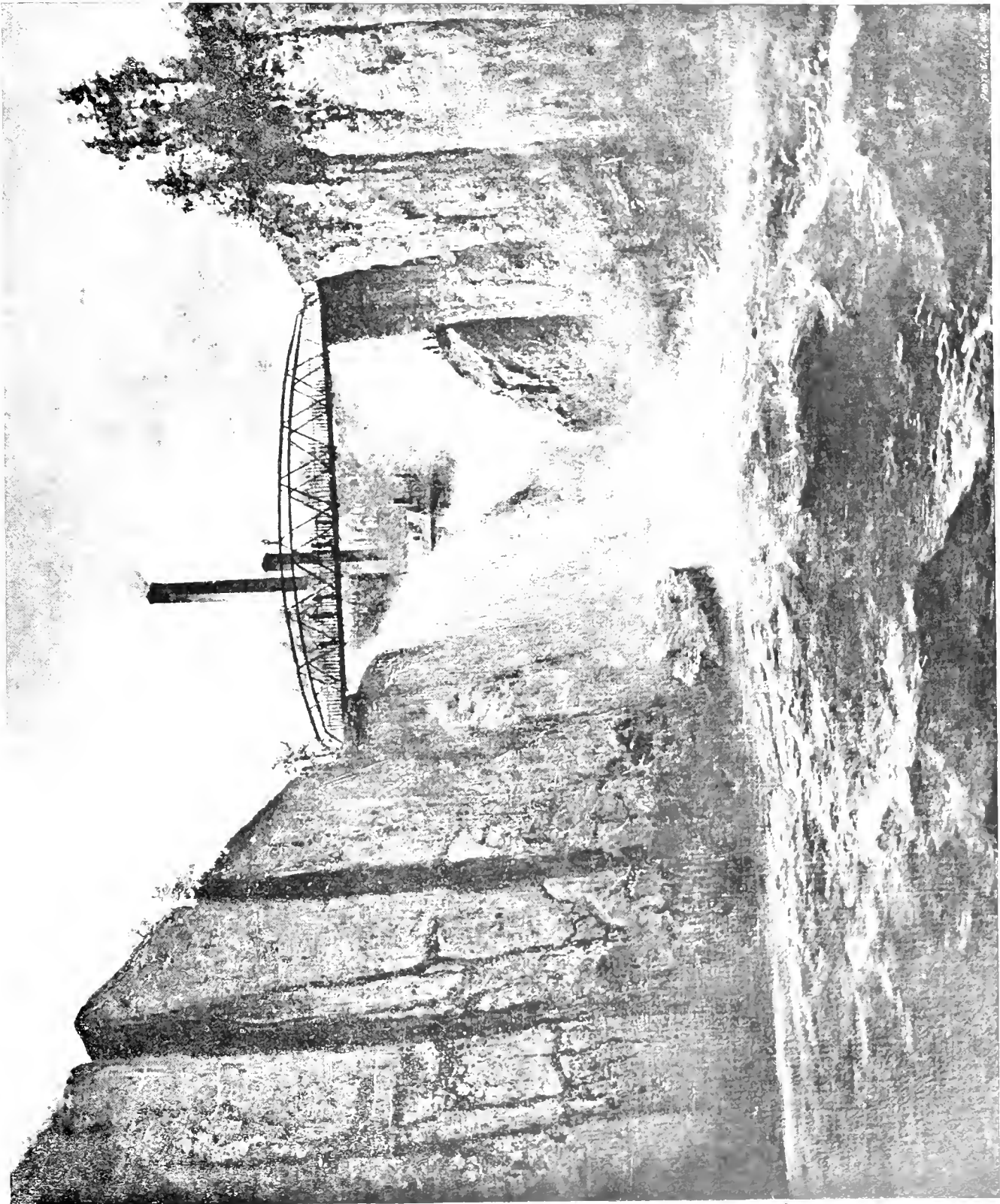
Clerk of the Board of Freeholders—William Nelson.

PATERSON CITY GOVERNMENT.

Mayor—Nathan Barnert.
 City Clerk—George Boyd.
 City Treasurer—Cyrus W. Baldwin.
 Clerk of the Board of Aldermen—John T. Pollitt.
 Registrar of Licenses—Charles L. Henry.
 Comptroller—Daniel Miller.
 Receiver of Taxes—William High.
 Deputy Receiver of Taxes—Charles H. May.
 City Counsel—Thomas C. Simonton, Jr.
 City Surveyor—William Ferguson.
 Assessors—James Parker, John Townley, Jacob Edel-
 man, William H. Bradley.
 Commissioners of Appeal in Cases of Taxation—Albert
 D. Winfield, Hugo Bach, James Blundell.
 Superintendent of Streets—Thomas McLean.
 Clerk to the Superintendent of Streets—John H. Hurd.
 Board of Aldermen—First Ward—John Hartley, George
 Rear; Second Ward—George Addy, William R. Hard-
 ing; Third Ward—Samuel Bunting, John Macdonald
 (President); Fourth Ward—John Curtis, Jr., Thomas
 Rawson; Fifth Ward—James H. Feeney, Sidney S. Lap-
 ham; Sixth Ward—James Miller, Joseph Keppler; Sev-
 enth Ward—Samuel Crawford, Henry Kelly; Eighth
 Ward—James Brownlee, Edward Fanning.
 Janitor of City Hall—John Mickle.
 Board of Education—First Ward—John Hickman (Presi-
 dent), Daniel E. Patrick; Second Ward—James A. Gil-
 fillan, DeWitt C. Edwards; Third Ward—William H.
 MacDonald, Sylvester Van Gieson; Fourth Ward—Arthur
 B. Pearce, Harry C. Boines; Fifth Ward—Frederick C.
 Barnes, Robert B. Davidsen; Sixth Ward—Louis Kir-
 singer, Jr., William Snyder; Seventh Ward—John J.
 Warren, John J. Canning; Eighth Ward—Henry C.
 Richards, John Rainey.
 Secretary of the Board of Education—Henry D. Oler.
 Superintendent of Public Instruction—Orestes M. Brands.
 City Physician—Dr. Frank Agnew.
 Assistant City Physician—Dr. Thomas L. Paton.

Health Inspector—Dr. John L. Leal.
 Plumbing Inspector—John Hickman.
 Board of Health—Dr. T. Y. Kinne, Dr. P. A. Harris,
 Dr. B. C. Magennis, Dr. John L. Leal, Dr. Frank Agnew,
 John T. Pollitt, James Mills.
 Secretary of the Board of Health—John J. Warren.
 Superintendent of Outdoor Relief—Jacob Ryerson.
 Superintendent of Indoor Relief—Henry P. Ackerman.
 Matron of Almshouse—Mrs. Henry P. Ackerman.
 Inspector of Weights and Measures—William Shields.
 Inspector of Buildings, Lamps, Wells and Pumps—John
 H. Van Houten.
 City Veterinary Surgeon—Dr. William H. Lowe.
 City Weigher—William T. Crossman.
 Poundmaster—Harden Paruley.
 Chief Engineer of Fire Department—John F. Murphy.
 Assistant Engineers of Fire Department—John Gillmor,
 John Struck.
 Superintendent of Fire Alarm—James F. Zehuff.
 Board of Trustees of Free Public Library—Dr. E. J.
 Marsh, George Wurts, John H. Hopper, Charles Dam-
 forth, Robert A. Haley, the Mayor and Superintendent of
 Public Instruction, ex-officio.
 Librarian—George T. Winchester.
 Park Commissioners—William Strange, John Mallon,
 Henry B. Crosby, John Agnew, Edward T. Bell, David
 Henry, John I. Holt.
 Secretary of Park Commission—Frank Amiaux.
 Judge of District Court—Francis Scott.
 Clerk of District Court—George N. Hoxsey.
 Recorder—Joseph Greaves.
 Clerk of Recorder—James H. Cocker.
 Chief of Police—Frederick G. Gaul.
 Captain of Police—John Binson.
 Sergeants of Police—Adam Hargreaves, James Hewitt,
 John McBride, Michael Keefe, John Ricker, Matthew
 McGirr.

SCENERY



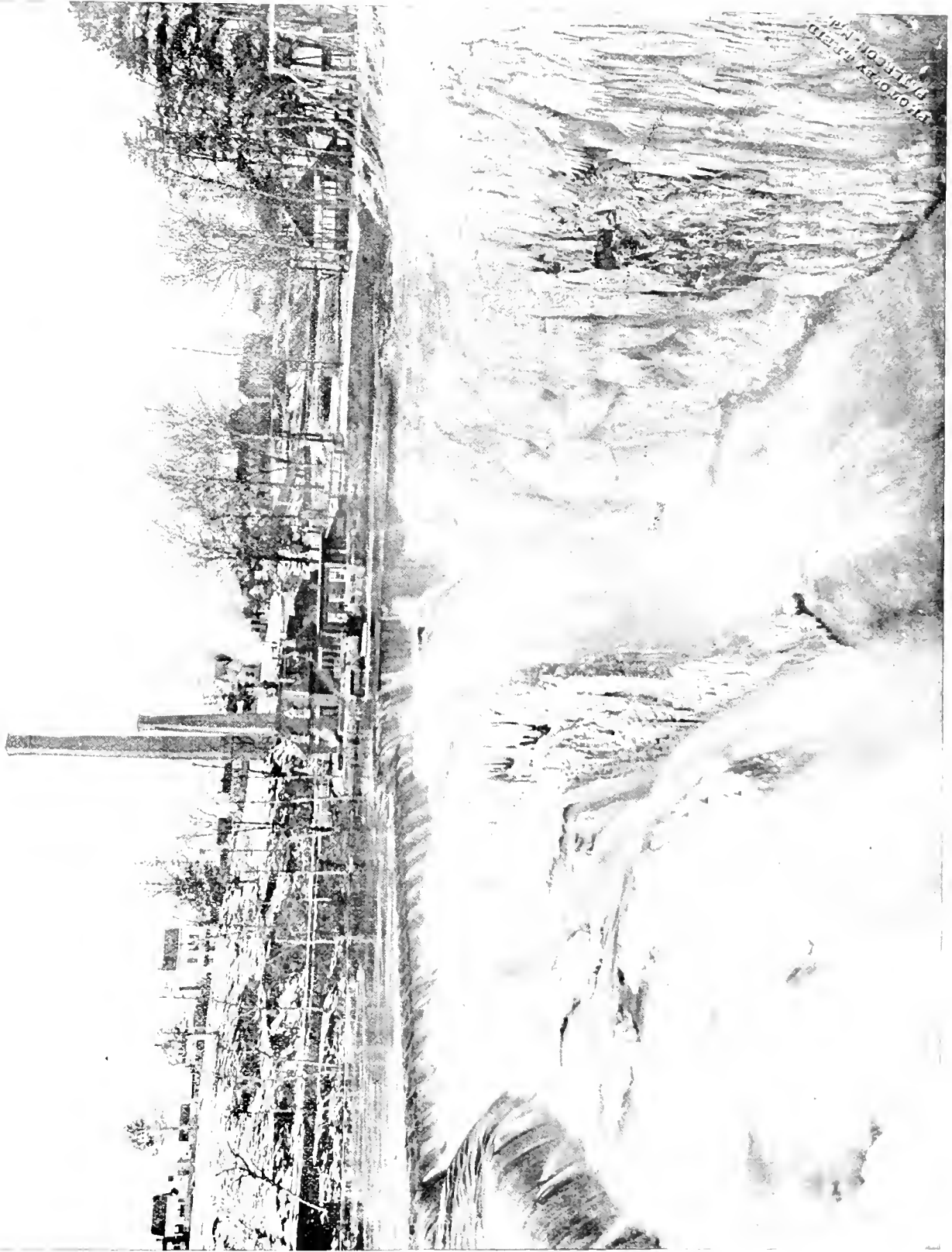
THE PASSAIC FALLS.

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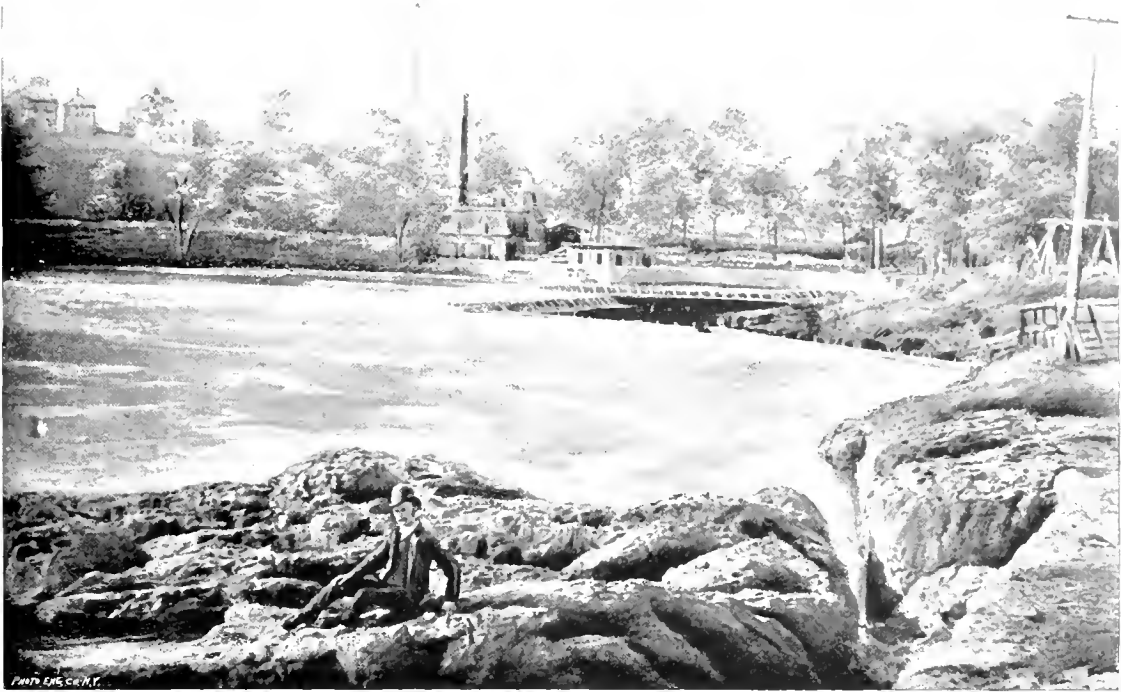
THE PASSAIC FALLS IN SUMMER.



THE PASSAIC FALLS IN WINTER.



ICE EFFECTS AT THE FALLS.



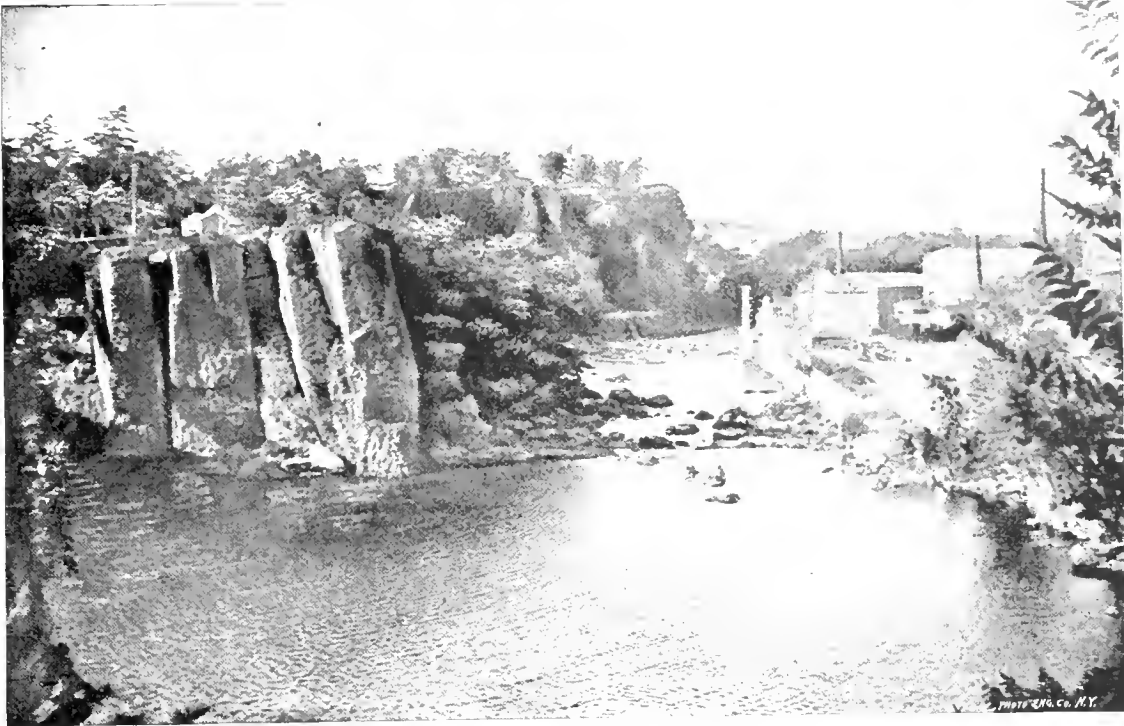
ABOVE THE FALLS.



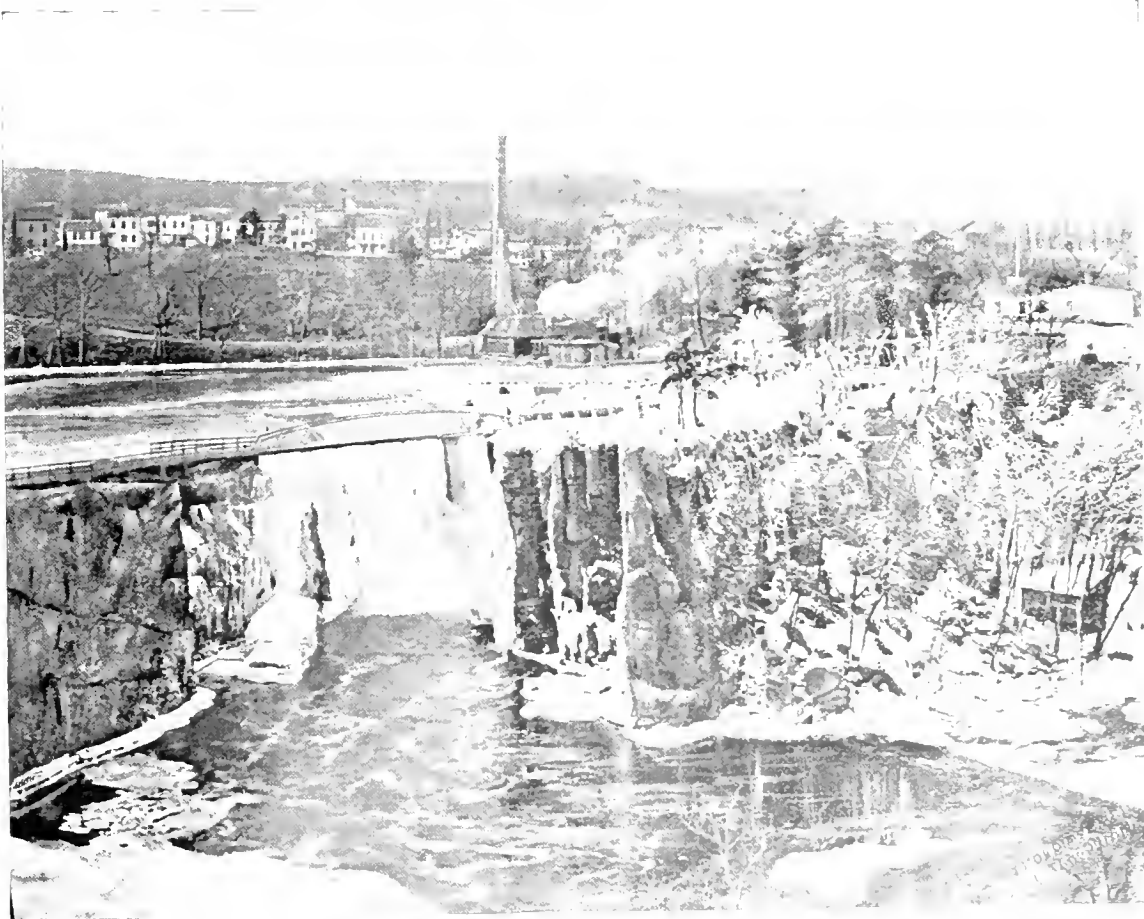
BELOW THE FALLS.



VIEWS ABOVE THE FALLS.



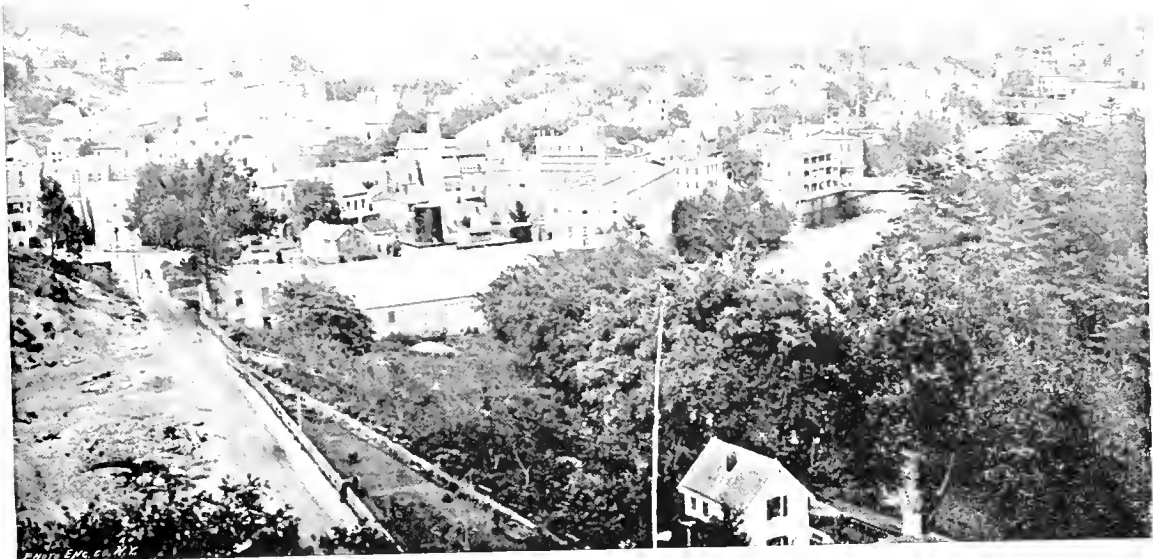
THE BASIN BELOW THE FALLS.



ICE EFFECTS AT THE FALLS.

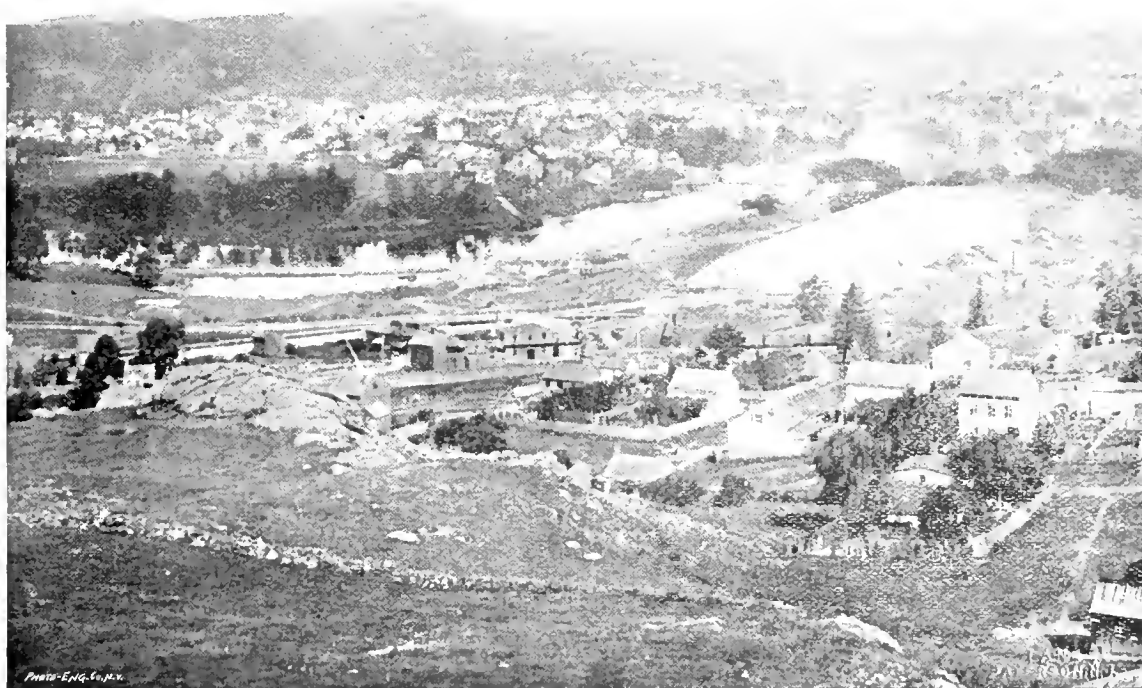


BIRD'S EYE VIEW TAKEN FROM SOLDIERS' MONUMENT.





VIEWS OF PATERSON.



NORTHWESTERN EXTREMITY OF PATERSON.



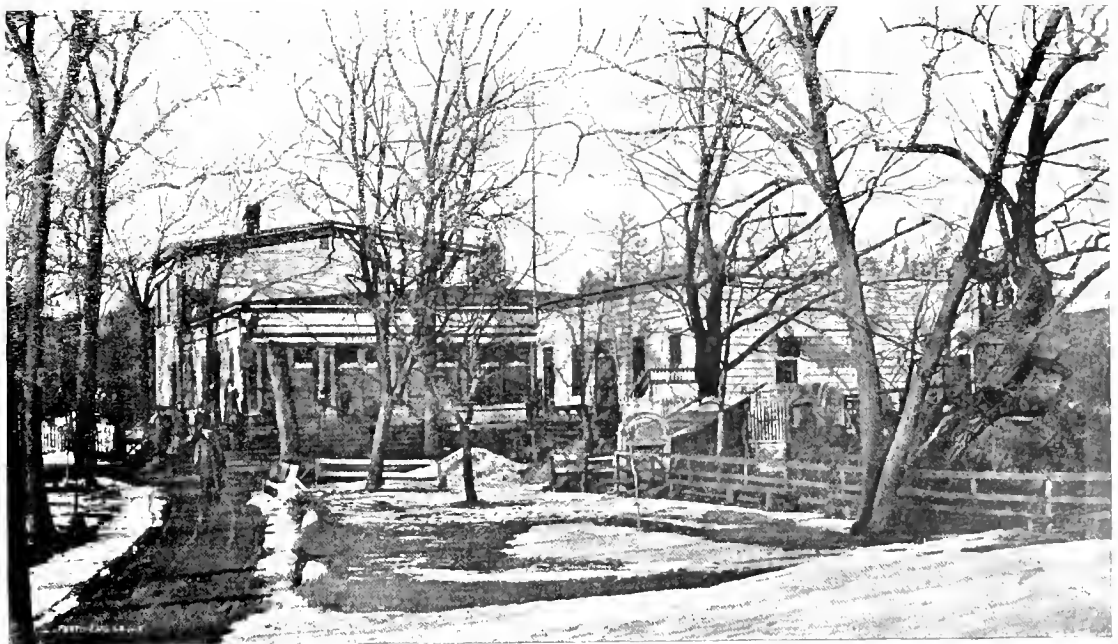
SOUTHERN EXTREMITY OF PATERSON.



VIEWS IN PASSAIC VALLEY.



VIEW IN PASSAIC VALLEY.



COTTAGE ON THE CLIFF.



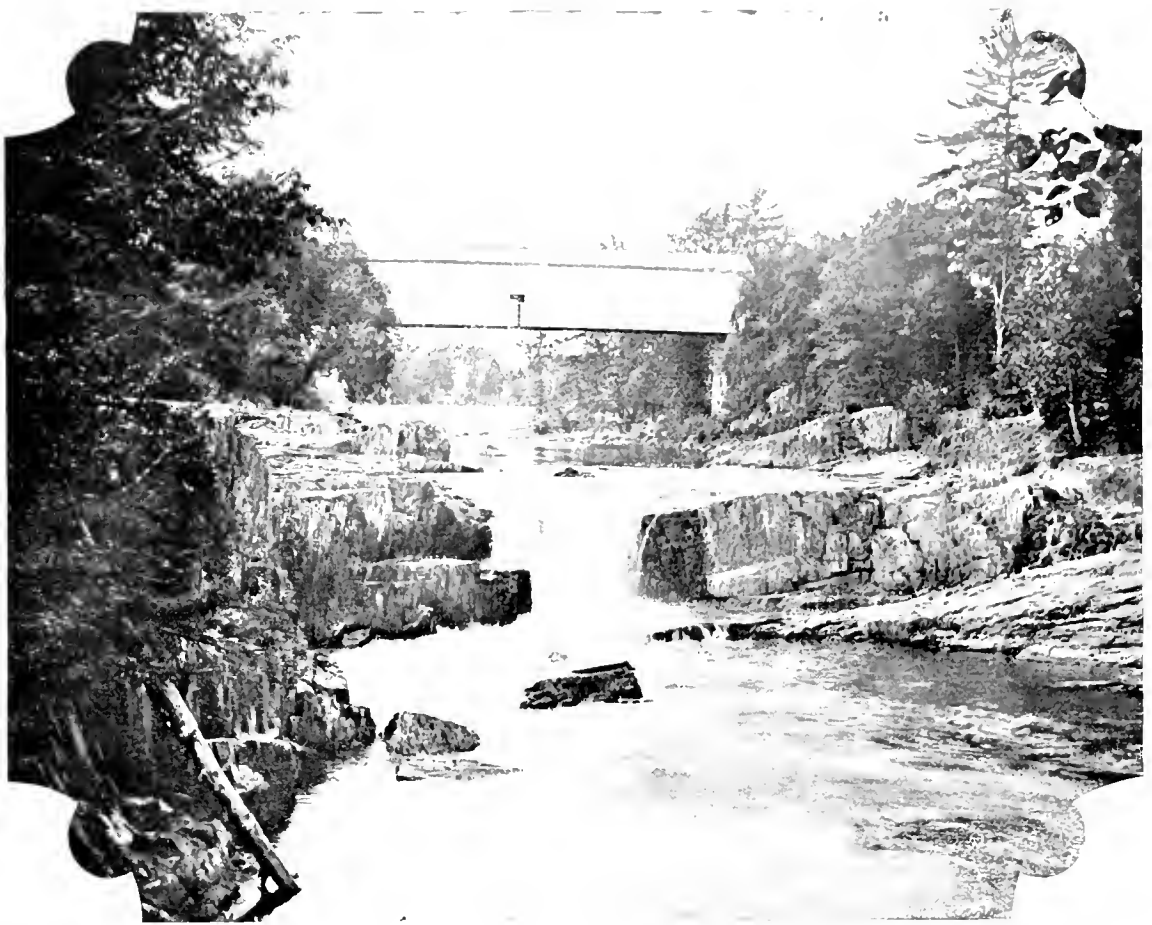
PHOTOGRAPHED BY J. N. LANE

VIEWS IN WESTSIDE PARK.



PHOTOGRAPHED BY N. LANE.

VIEWS IN WESTSIDE PARK.



THE LITTLE FALLS OF THE PASSAIC.

The Progress of Paterson.

By Mr. WILLIAM G. FENNER, Vice President of the Board of Trade.



What I have to say of the advantages of Paterson as a manufacturing centre I do not expect to add to the knowledge of our citizens upon the subject, but rather to aid in their selection the many who are seeking a location for their plant where at least a reasonable certainty of success can be assured their enterprise.

Conclusions drawn from established facts constitute the best information in a matter of this kind and such conclusions I will now submit, leaving the task of application to the personally interested parties.

The query is can Paterson in perfect fairness be classed as a city especially well adapted to manufacturing purposes?

The answer to this question can in no better way be made and emphasized than in a brief historical outline of Paterson's more important industries, touching upon the salient developments of each from their origin up through the lapse of years to the present time with its wealth of industrial achievements and clearly defined prospects.

The present century was yet in swaddling clothes when the cotton industry was experimentally established in this city. Manufacturing was new to the country at that time and the impression created by this springing up of the cotton industry at Paterson was profound. The pioneer factories were individually small yet so numerous that the public mind was struck with the seemingly vast proportions of this comparatively new agency of profit to the community. The time speedily came when the cotton milling industry was no longer experimental but established with its work mapped out on an essentially larger scale with time, the inevitable unifying of fragmentary interests, the merging of many small plants into a few larger ones with perfected means for carrying the raw cotton through the various processes of manufacture resulting in the finished cloth ready for use. The outside public then felt and in a measure still think that Paterson lost part of its cotton industries. The principle of merging was not understood and with fewer individual factories in operation

the impression gained and maintained ground that the vitality of the industry itself was on the wane. The fact is however, that the seeming loss was an actual gain. Unquestioned statistics show that in the year 1825 the number of spindles operating in the cotton mills of this city was 21,000, while in 1880 they showed a total of 10,000, representing a substantial gain in spindles and a still more substantial increase in the value of production. The Eastern and Middle States form the great center of the cotton manufacturing industry and a leaf taken from their history substantiates fully my position that the change from many small to a comparatively few larger plants has resulted in a striking increase rather than a decrease of the output. In the year 1831, 850 establishments were in operation while in 1880 only 570 concerns were in the field. But from 1831 to 1880 the number of spindles developed from 1,237,000 in the former to over 10,000,000 in the latter, while the number of hands employed increased from 60,000 to 150,000. In New Jersey alone the year 1831 saw 62,000 spindles in operation in fifty-one establishments, while 1880 with its seventeen establishments displayed an active equipment of 2,320,000 spindles.

The locomotive manufacturing industry started in Paterson through the enterprise of Mr. Thomas Rogers in the year 1830. At that time railroading was in its infancy and about fifty miles of rail was all the country could boast of. It will be readily inferred that under these circumstances the locomotive business was in a decidedly embryo state. Looking back from the high plane of present achievement the crudities of the early time are astonishing. The first locomotives built were fitted out with wooden wheels and wooden frames and were guaranteed at high pressure and on a favorable grade to travel at the then lightning express speed of twelve miles per hour, a speed that was then regarded as a menace to the lives of passengers and a marvel to the astonished beholders. This industry however advanced with giant strides along the pathway of me-

chemical progress and by sheer force of intrinsic merit won its full share of substantial recognition in the quick work of supplying the country's rapidly increasing mileage with its rolling equipment. During four prosperous decades no industry it is perfectly safe to say ever made more headway than the one in point, but as it increased in vigor and size so did other industrial enterprises. Milling concerns of one kind and another extended their plants and rapidly hemmed in the locomotive works of our city ending the possibility of their all-essential enlargements. Additional and adjacent lands could not be acquired and additional room could only be gained by establishing annex departments either across the street or around the corner or by using the upper stories of their buildings thereby adding materially to the expense of handling and consequently to the cost of production. The unbearable extravagance of this method of doing business was not realized until competition commenced to assert itself. The margin of profit was sharply narrowed down and the Patersonian manufacturers began in earnest to feel the burden imposed upon them by that extra handling expense, the result of inadequate and imperfectly arranged premises. The few of our manufacturers with plenty of room continued to manufacture and market their locomotives with equal profits to those received by the best of their competitors, but those who did not enjoy the advantage of elbow room found themselves in the unfortunate position of doing a business devoid of compensation. This condition of things created considerable uneasiness in representative quarters of the industry and finally culminated in the resolve of a prominent manufacturer to move his entire plant. After a careful consideration of the advantages afforded by other localities and with the knowledge gained by long years of experience the manufacturer in question concluded and did relocate in our city on a site that amply meets all prospective as well as present requirements. There the enterprise flourished and to-day constitutes one of the finest locomotive plants to be found in the country, replete with every mechanical improvement and under a management that cheerfully welcomes competition and feels safe in the positive knowledge that better work and cheaper prices than their own rank among the impossibilities.

Paterson has the advantage of unusual railroad facilities and furthermore occupies a commanding position in the very outskirts of the great business centre of the country. This enables our locomotive manufacturers to stand ready as they do to supply the world with their machines.

A few years ago the Paterson Iron Works were destroyed by fire; the catastrophe was complete and nothing but ruined walls and worthless machinery was left to emphasize rather than palliate the misfortune. These works were then as now known to the entire country for their heavy forgings. Rival concerns of this class are few in the United States and none among them can shape and forge a heavier shaft, crank, or beam or ought else in which calibre, strength and finish contribute to the essential elements of production. These representative works are amongst the oldest and most

prosperous of our city's large family of splendid enterprises. Having grown practically with the city all the advantages and disadvantages of a location here were as a matter of course fully apparent to the owners of this enterprise but without giving other aspiring points more than a passing consideration the work of reconstruction was commenced and substantially consummated on the old site. To-day visitors to our city see this prosperous concern under vigorous headway shaping the mammoth shaftings that find their utility in the great ocean racers of the day and the floating palaces that leave their wake upon our inland waters.

In reviewing the growth of our varied industries we must not overlook the machine shops of Paterson, which have faithfully kept pace with the times in meeting the natural wants of so large a manufacturing centre. In place of the one story building and small ground space that adequately met the needs of the situation a few years ago we find these works to-day operating on a large scale, occupying imposing structures, steadily increasing the scope of their energies and adding to their number at the average rate of one or two concerns per year.

The two rolling mills that form an important part of our iron industry deserve a word of special mention. This is particularly true in the case of one that twenty years ago was humble to the verge of nothingness and to-day stands a monument of magnitude in its special field of work, a constant surprise to our own citizens and a source of wondering admiration to the visitor. So widespread are the energies of this great concern that the average well informed traveller will be apt to place every iron bridge he crosses to the credit of the Passaic Rolling Mill Company. Some of the finest bridges in this country are the product of this company, whose skill is pointedly exemplified in the splendid structure near our own city (the bridge spanning the Harlem River) substantial in its construction, symmetrical in its proportions and technically faultless in conception; this work of highest engineering proves its makers to be master workmen in the broad sense of the term.

It was reserved for the year 1840 to usher into our city's industrial life an enterprise which has elevated the standard of labor and created an era of prosperity beyond the highest hopes entertained by the most enthusiastic believers in the enterprising silk worm. While silks were manufactured in this country nearly twenty years before their production in our city, still to Paterson mainly belongs the honor of developing the industry into a permanent and high class feature of American industrial art. Baltimore should however have the credit rightfully belonging to her of producing the first silk goods manufactured in this country. In 1820 she put upon the market the first line of American ribbons. In 1834 Boston entered the silk manufacturing list with the enterprising town of Florence, Mass., close upon her heels. In 1835 Dedham, Mass., followed suit, while three years later Windsor Locks and South Manchester, Conn., joined the briskly awakening industry. It was not however until 1840, as noted

above, that Paterson put her shoulder to the silk industry wheel with what success will be seen in the following table, showing the value of silk goods manufactured:—

	1860.	1870.	1880.
Pennsylvania,	\$1,700,000	\$1,600,000	\$2,800,000
Mass.,	1,300,000	1,400,000	4,000,000
Conn.,	1,200,000	3,300,000	5,000,000
New York,	1,150,000	1,800,000	9,300,000
New Jersey,	970,000	4,000,000	13,000,000
Paterson,			\$11,000,000

This table is significant in many ways and of many things. In the first place Baltimore, the pioneer of American silk manufacture, during the twenty years under tabulated review falls completely out of sight and consideration. Pennsylvania has only succeeded in securing a gain of \$1,100,000 during the two decades, while Massachusetts, and Connecticut although doing better than the Bay State champion, have scored no very conspicuous gains on the record of 1860. New York has done still better but with all her great trading advantages has taken twenty years to multiply her old time silk manufacturing achievements by eight, whereas our own city has developed twelvefold in the same time, even assuming that all the silk goods produced in New Jersey during 1860 were made in Paterson, which was not the case. The silk industry like all others seeks a field with advantages that assimilate with its special requirements. These advantages once clearly demonstrated and the attention of the entire industrial world is promptly brought to bear on the favored locality. Kindred industries at once crowd to the spot and a trade focus is established. It is a historical fact that no industry ever gathered to a common centre faster than the silk industry has established itself at our city. The reason of Paterson's supremacy in this connection lies to a great extent in its adjacency to the City of New York, the head centre of the country's trade. Our city stands sufficiently near to the metropolis to share in its paramount trade advantages, yet is far enough away to avoid her big sister's larger taxes, more expensive ground rents and the higher cost of living there entailed upon operatives. Paterson's further advantage is its abundance of water especially well adapted for dyeing purposes.

In 1864 an industry had a precarious establishment in our city that in its rapid growth challenges the attention of every student of industrial progress. It was put into operation by those who possess the embodiment of clear and far sighted business tact and indomitable perseverance, two qualities that enabled them to conquer apparently insurmountable difficulties in the development of their undertaking. This industry embodied the Americanizing of a foreign plant nourished under other than Irish climatic conditions. The pioneer promoters had nothing upon which to base a warranted judgment, but upon general principles they selected Paterson as the best location for their experiment. Their views, however, were promptly vindicated and the manufacture of linen thread was no longer an industrial exotic. This infant of 1864, spoken of as the modest industry by one of the founders, gained

strength rapidly and in its present development occupies several buildings of mammoth size. Its product, "Barbours' linen thread," is known to every dress and shoe maker in the land as Paterson made and to every one of our citizens as an article representing a business and a still growing one of one million five hundred thousand dollars a year.

A few years ago large quantities of what is known as hemp carpets came from Dundee, Scotland. These carpets are used mostly in country towns and one of their chief merits is beauty of design. Owing to the low price at which these carpets are sold the masses are enabled to beautify their homes at a small expense. Through the large production of these goods the manufacturers of this quaint Scottish town were well paid for their enterprise and it is without question a sore disappointment to them to find that anything so Scotch could ever become Americanized and a greater surprise to find how soon this article of foreign birth should become acclimated and comfortable in a land so far away from home with no show of desire ever to return. While there are a few factories for the manufacture of this article in different sections of the country we can boast of three factories in our city which from all appearance and some knowledge are doing a thriving business. In this connection we might speak of an article which is made in Paterson and which forms the foundation of brussels carpets. We lay no claim to an over large amount of jute yarn made here but in this case the infant is too young to anticipate what it may grow to, but we feel satisfied from its generally healthy appearance it will attain large proportions and soon rank amongst the prosperous industries of the City of Paterson.

The following table will enable us to more fully appreciate the rapid growth of industries in this State and at the same time help us to more fully realize the important share sustained by our city in the general development:—

	ALL GOODS MANUFACTURED.			
	1850.	1860.	1880.	Amount to Population, ca. Ind'Y.
New Jersey,	\$39,000,000	\$ 254,000,000		
Pennsylvania,	155,000,000	745,000,000		
New York,	237,000,000	\$1,080,000,000		
Paterson,		26,000,000	51,000	\$500
Newark,		69,000,000	136,000	500
New York City,		472,000,000	1,200,000	100
Massachusetts,	157,800,000	631,000,000		
Rhode Island,	22,000,000	104,000,000		
Connecticut,	47,000,000	185,000,000		

INCREASE FROM 1850 TO 1880.

Connecticut, 4 fold. Massachusetts, 4 fold. Pennsylvania 4 fold.
Rhode Island, $4\frac{1}{2}$ " New York, $4\frac{1}{2}$ " New Jersey, $6\frac{3}{4}$ "

So it will be seen that our State has outstripped all competing manufacturing centres in the spirited race of the past thirty years.

The brief sketches I have outlined of our leading industries have not been executed with a design to overshadow their importance. My aim has been solely to describe them as I know them to be and without seeking the views of others.

As to the permanency of our manufacturing industries we can only base our conclusions up on the historically depicted influences of time upon the other industrial centres of the world; influences that lead us to regard the future with even confidence in the stability of Paterson's prospects.

Manufactures, like trade, fit themselves to certain localities. As manufactures grow and cluster around a common centre so in equal ratio of development do operatives increase in numbers until finally the two become so wedded to a locality that a majority of the manufacturers of kindred class find it to their advantage to work shoulder to shoulder with skilled labor domesticated at their very doors.

The only manufacturing centre in the world which has stood still during the past fifty years, or at least gained but little, is a town in England, but as other causes aside from consideration of location are responsible for its stagnant condition it is devoid of significance so far as the question now under discussion is concerned. My position is amply fortified by the following examples:—

Lyons, the great silk manufacturing centre of France, whose industry was in full operation before the advent of Francis I:

Belfast, Ireland, whose linen manufactures date back over one hundred years:

Dunfermline, Scotland, the centre of Scotch linen trade, whose industry has been known all over the civilized world for many centuries:

Paisley, Scotland, the home of shawls and cotton thread manufacture:

Manchester, England, noted for cotton and wool dress goods:

Bradford, England, conspicuous for many years for her production of alpacas and mohair lusters:

Sheffield, England, historically famous for her cutlery:

Basle, Switzerland, notable for her silk and woolen industries:

Chemnitz, Saxony, identified the world over for her hosiery product:

Birmingham, England, the head centre of the iron industry:

Zurich, Switzerland, the oldest silk manufacturing market in the world:

Elberfeldt, conspicuous for her woolen goods, and

St. Gall, Switzerland, the mammoth production of Hamburg embroideries:

Most of these world renowned centres have been in vigorous existence all the way from two to five hundred years, and all of them are now at the highest point of development in their respective histories.

There is only one conclusion to be drawn from this array of historical data, viz: that no manufacturing centre where the plant has been fully established has ever lost its industries or weakened in its industry. The history of the age has been development, first and last and all the time, stable in its progress and equally stable in its fealty to a location having established advantages.

In the above I have shown as a deduction from clearly defined facts that Paterson has steadily increased in her industries and industrial voyage from year to year; furthermore, that her adjacency to New York City, the trade and commercial centre of the country, assures obvious advantages that are virtually bound to give her an unsurpassed industrial position, the permanency of which is a foregone conclusion if the uniform experience of centuries the world over can be accepted as a guarantee of the future.



The Board of Trade of Paterson.

By Mr. JOHN J. BROWN, President of the First National Bank.

IN the busy life of the present day, when events that are new crowd out from remembrance those which are even only of the recent past, it may not be a matter of wonder that the early transactions of the Board of Trade are so dimly remembered, not to say quite forgotten, as to make the question "What has the Board of Trade done?" quite a pertinent one.

As a reminder that its history has not been quite a blank, but more, perhaps, that we may be encouraged to make further efforts; and still more, that others of the city of Paterson, just as able men and just as much interested in its present and future welfare, shall give us their aid, the duty has been laid upon me to collate some of the more prominent actions and efforts of the Board from its organization.

The unwritten history of a society or community can never be told. The forces and influences which work under the surface of society, like those of nature, are felt and seen in their effects; but even these can only be traced in part. Thus the silent influence of this Board as a whole, or the more or less active efforts of the individual member, can only be surmised. The actual work done can only in part be judged by reference to the recorded history, taken from published proceedings. These necessarily give only an imperfect idea of the work accomplished.

Though the name of our organization is the Board of Trade, it should embrace, in a city like ours, all those who desire the well-being of the place in which they live; therefore, the professional man and the artisan, as well as the merchant and the manufacturer, should be interested in our efforts. I find this thought has already found action in our Sister Board of Trade in Newark, where for president they elected R. Wayne Parker, one of the best known lawyers in the State; for vice-president, Judge McGregor, and for secretary Comptroller P. J. Quin. There may be other professional men in the official list, but I do not now recall them.

With these preliminary remarks please permit me to notice as briefly as the objects will allow, some of the more important acts of the Board.

Its existence dates from 1873 and it was founded amid a depression in the business of the city and country which has happily seen no parallel since that time. The loco-

motive business, then, as compared with all our manufactures, a more important industry than it is now, was nearly paralyzed, and this of necessity affected all other business. That first year the Board gave attention to removing the false impression among the fire insurance underwriters of New York that our water supply for extinguishing fires was wholly inadequate. The facts, based upon a full report and a faithful examination by a Committee of the Board, were so placed before them, that the exorbitant rates were reduced, so that we stood on an equally favorable basis with any other city adjacent to New York. The report alluded to, however, showed some deficiencies in the water supply, which the water company promptly remedied. During this year action was taken by a committee which established better relations with the Erie railroad company and increased facilities for transportation were secured. The Board, appreciating the distress which prevailed during the winter, exerted themselves to alleviate as far as possible the sufferings of the needy. They as a body, apart from the individual efforts of the members, or with other organizations, contributed and placed in the hands of the general relief committee \$2,200. The reports on the silk industry this year show that there were then about twenty-five firms and corporations engaged in the manufacture. The capital invested was about four million dollars. Direct employment was given to about four thousand operatives (two-thirds of whom were females) and an indirect employment to about one thousand mechanics engaged in making machinery and various articles necessary for the successful conduct of the business. The amount paid to these operatives was some two million dollars. Statements are incorporated here in order that those who take an interest in such matters may compare them with the present, now that seventeen years have passed. In this first year, as well as the succeeding one, the Board was presided over by the late Thomas Barbour. His large experience with other bodies of a like character, together with his interest in the welfare of the city (not to name his great business interests here), and his large views of business generally, made him a truly valuable presiding officer.

The reports of the year 1874 tell of but a partial activity in business, but of a very hopeful nature, by reason of abundant crops. Only a few signs of life were as yet

shown in the locomotive industry. Other iron industries were reasonably active and some new manufactures in iron were introduced. A very material improvement had been made in the silk manufacture.

The year 1875 was probably, in one respect, the most important year in the history of the Board of Trade. The officers adopted a plan of having prepared in an authentic and comprehensive form, something like a history of the great industries, which in the infancy and later years of our city, and in its riper and stronger present, have been the basis of its prosperity and renown; comprising necessarily a history of the city itself; for its manufactures and prosperity in other things, nay, its very existence, have always been one and inseparable. The preparation of these historical sketches was entrusted to such members of the Board as were identified with the great manufacturing interests of the city; each treating a topic within the scope of his personal experience. The result was such that there was an amount of authentic information and statistics gathered which has since been a mine from which statistical workers have drawn, and must in the future be the foundation from which the records of early business of Paterson must come. These valuable papers were published in the third annual report of the Board of Trade and embrace the following:—the Iron Industry, by Mr. John Cooke; the Silk Industry, by Mr. Catholina Lambert; the Flax, Hemp and Jute Industry, by Mr. John Swinburne; the Cotton Industry, by Mr. Joseph W. Congdon; Miscellaneous Industries, by Dr. Charles Inglis; Our Financial Institutions, by Mr. John J. Brown; Our Public Schools, by Mr. George L. Catlin; Sources of Power in Paterson, by Mr. George Wurts; Historical Notes and Statistics, by Dr. Charles Inglis. That there has been quite a large outside demand for these reports gives testimony as to their value. Published also in the same annual report was a supplemental report of the Committee on Water Supply which covered all the points complained of and suggested such improvements as should be made. It may be sufficient to say here that early and large improvements were made by the water company, so that with these and later improvements made in after years, also suggested by a Board committee, the water supply of the city is placed beyond complaint. This year the late William Ryle was chosen President of the Board. He took a large interest in its prosperity and served with great ability until his lamented death in 1881.

The year 1876 was also a good year and full of interest. A history of its transactions would make a more extended paper than is the design of this little memorial. It is proper, however, to name briefly some of the incidents of the year. It is scarcely necessary to call attention to the fact that this was the Centennial year. Early in the year the subject of properly celebrating the ensuing 10th of July was discussed. In the reports of that year Dr. Charles Inglis gives a very full sketch of this celebration, which, inaugurated by the Board, was made a grand success by a combination of work by committees of the Board, of the

Grand Army of the Republic and of the citizens. A large subscription was at once made by members of the Board. This was supplemented by the General Committee of Finance, the result of their joint effort being to raise in that year of stringency not only enough to meet the liberal expenditure for the celebration but to donate a surplus of \$750 in equal parts to the Ladies' and St. Joseph's hospitals. It is nearly fifteen years ago but many will remember the profuse decorations, the grand procession, the memorial services at the Wigwam and the fireworks on Dean's Hill. It will be understood that this was a general celebration entered into and promoted by all classes of people. It is named here because it was inaugurated in the Board and the first and largest subscriptions were made here. During the year papers were read on the subject of the Silk Industry, by Mr. William Strange; the Locomotive Industry in the United States, by Mr. John Cooke; Our Educational Interests, by Dr. Charles Inglis; a report was made on Our Gas Light Interests by Messrs. J. W. Congdon, Thomas N. Dale and George Wurts. The very important subject of a Free Public Library was part of one of the subjects touched upon this year. Mr. Dale, the chairman of the Library Committee, endeavored to secure an act of the legislature, which was then deemed all that could be accomplished. This was to make it an adjunct of the public school system. Messrs. John Swinburne and John Cooke as a committee reported the results of their investigations as to the usefulness of a library of this kind in the State of New York. The great subject of a free public library came up on other occasions, but it is pleasant to say that a far better system than any devised by the Board has been given by the action of the State and the happy acceptance of it by our citizens.

One of the results of the labors of 1877 may be seen in what may be called our very modest depot at the Erie railroad. For this year it does not seem quite adequate to the grown proportions of the city and it is gratifying to know that the railroad company is preparing to put in its place a handsome and commodious structure; but twelve years ago, when compared to the one which preceded it, it was considered quite a triumphant success. The Erie people then were a hard set to move; much breath had been spent in talking, not to say complaining, and much politeness was shown in not doing anything. Efforts were made to satisfy the applicants, with promises to repair. It took a committee as strong as Messrs. Crosby, Buckley, Barbour, Dale and Ryle to overcome apathy or inability, but it was done and the new depot was secured. Another matter of large importance occupied the attention of the Board this same year. This was the supposed necessity of an increase in the number and efficiency of the police force of the city. It was a time, for various causes, of a widespread disaffection in the ranks of labor. This was especially the case with employes in railroad labor. Extensive and disastrous riots had occurred in the West, an uneasy feeling was prevalent here as in many other places. Workmen were molested by their fellow workmen. The

condition forced the conclusion that the police force was inadequate either for the city or the times. It is enough to say here that the efforts of the Board through their committees largely contributed to the correction of this deficiency and of late years no objections have been made manifest so far as the force itself or its management is concerned. On the contrary, great praise has been earned and freely given to this important department of our city government.

The years of 1878, 1879 and 1880 may be profitably passed over by saying that no action of marked importance during these years was taken and I shall content myself with a statement of some of the topics considered. A valuable report on the sanitary condition of the city was made by Messrs. Inglis, Crosby and Fenner, mainly on the subject of sewerage. The question of change of pay day by manufacturers from Saturday to some other day was considered; reports on legislation at various times; reports on general industries; the reception to General Grant. Additional and fuller reports on Passaic water supply by Messrs. William Strange, Watts Cooke, W. G. Scott and Henry V. Butler, with a valuable report on the capacity and powers of the water company, were made by E. LeB. Gardinier, Hydraulic Engineer, who had been engaged by the committee.

The year 1881 may be named as the one in which the first action was taken in reference to Public Parks. The first and in fact the only committee, for they served to the end, was appointed to take the matter into consideration; of this committee Mr. Crosby was made chairman. This same year the question of making the Passaic river navigable to Paterson appears in the proceedings of the Board. A committee under the chairmanship of Mr. Strange was appointed to take action towards getting an appropriation from Congress for making a preliminary survey of the river. A committee was likewise appointed under the chairmanship of Mr. H. V. Butler with instructions to have proper action taken to obtain a suitable building which would adequately serve our growing city for post office and other Government needs. Further mention of these three great enterprises will probably claim attention later. Again was the attention of the Board called to the utility of technical education in a city so thoroughly a manufacturing one as this; indeed, it occupied the attention of members constantly during the year. Able addresses were delivered by Messrs. Hilton, Fenner and Morris.

The following year, 1882, still found the Board struggling with the subject. The committee having this matter in charge, under the chairmanship of Mr. Watts Cooke, presented a very full report, looking to a large effort in this direction: combining a suitable building with rooms for an industrial school, a library and reading rooms. However valuable an institution, such as was here proposed, would have been to the city, it is scarcely needful for me to say that it was not carried out; but doubtless the seed sown by these efforts have borne fruits and later and in other ways, not in combination but separately, we have the Public Li-

brary, the Reading Room and the Industrial School. This last named, incomplete as it may be, and in its infancy only, was the outcome of the efficient help of this Board, who raised a sum as a supplement to an amount which thereby could be derived from the State and which in connection with the Board of Education, their committee and our committee acting together, have established the first industrial school in this city.

The year 1883 was not marked by such action as calls for special mention. During previous years some considerable attention had been given to the unhappy condition of our streets. This year more attention was given to the subject and a special meeting was held in the hope of exciting a more lively interest in the attainment of good streets. This meeting was attended by several of our ex-mayors and a number of citizens not members of the Board. All present recognized the importance of the subject under consideration. A wide discussion was indulged in, all agreeing that the time had come for large improvements. The resolutions of the Board adopted on the occasion, promised an active support so far as the Board could, to those on whom the burden of responsibility would fall, in carrying out a wider system of street improvements, knowing that it meant an expenditure of money. It may here be added that very marked improvements have been made in our streets. Among the subjects which early in the year occupied our attention, was further action looking towards obtaining a public building for United States offices. It is as well to say here for all that this matter was never lost sight of, but was pressed as well as the circumstances would permit, until finally a bill was passed appropriating \$80,000 for the object and the signature of the President was obtained. We were favored by the active efforts of our representatives in Congress in every stage of the work. An active opposition in the House of Representatives prevented an adequate sum being appropriated, but there is now every prospect that the sum already set aside for this object will be materially increased and that our wishes in regard to a government building will be speedily realized. A very important action was taken this year which with the concurrent action of the Board of Aldermen may be called the turning point in the possibilities of improving our streets. This was a joint delegation, composed of the Street Committee of the Board of Aldermen and a committee appointed by the Board of Trade to visit Governor Abbott and urge upon him the necessity of signing the bill which had been passed for the benefit of Paterson, providing that permanent street improvements should be made at the general expense. The result of this joint action was a very kind reception by the Governor and his ultimate signing the bill. Under the provisions of this bill the improvements of late years have been made. Among other subjects which came up during this year was the navigation of the Passaic river to Paterson; the benefits of technical education and the methods of bettering the county roads under the supervision of the Board of Freeholders. In reference to the navigation matter it might be

well to say that a committee of the Board of Trade of Newark with a committee of this Board, accompanied by Mr. Dortlinger, the engineer, who had previously conducted a survey of the river on behalf of the United States government, made a trip over that part of the river which would have to be improved in order to make it navigable. He presented a chart and survey of the river made by himself and assistants, gave estimates of costs and methods of improvement and freely expressed his opinion as to the large advantages which would accrue to Paterson from a navigable river. Perhaps the most important matter which occupied the attention of the Board this year was that of public parks. Growing out of action previously taken, Mr. H. B. Crosby presented an exceedingly interesting paper on the subject. This meeting was near the end of 1881. We are now in 1890 but from the time first named to the consummation of the project, there was no time that this park matter was not uppermost in the mind of Mr. Crosby. Time and trouble seems of little consideration; when nearly all doubted, he held to his faith. The growing sentiment of the public was watched; the careful consideration as to the ways and means which were naturally felt by the "City Fathers," who had many responsibilities resting on their shoulders and naturally shrank from incurring large indebtedness, were met by the arguments as to the need of and the benefits to the people. As we all believe, the right won, the ordinance providing for the purchase of two extensive parks was passed and to Mr. Crosby's great delight he was permitted to hear from the great bell in one of our steeples a "ring out" which but few at that late hour of the night knew the meaning of. It must be named here, because it is to their great honor and far-sightedness, that the newspaper press of the city gave the aid of their powerful influence in securing this great blessing, so full of promises and health, comfort and pleasure to the dwellers in this hive of industry.

I have now reached a period so recent that it seems scarcely worth while to detail the various actions of the Board. The Delaware, Lackawanna & Western railroad company has at least heeded the appeals of the Board, made repeatedly in past years, and has constructed a spur into the city. By the destruction of Washington Hall building the Board of Trade lost its valuable library, which took many years to accumulate, its furniture and its records. At present the Board is actively engaged in procuring the erection of a fine city hall to meet the growing needs of the city. Very much of the work of the last years has been of the same character as that which has gone before. I trust, however, that I may be permitted to say, though I am myself a member of the Board, that in every discussion and in all actions, or attempted actions, the Board has had for its object the weal of the city and its citizens. Never at any time has any action been taken or effort been made which had personal or selfish ends. In public or in charitable efforts the money of its members

has been quite as freely given as that of other citizens. It may be said that it has not done enough, or even all that it could, but it must not be forgotten that the sins of omission are very easily committed, and there is no member of the Board who would not have rejoiced if a greater number and a larger interest and a greater good to our city had been the history of the Board of Trade. Those who have borne the heat and burden of the past will feel greatly the relief which will naturally come from the infusion of new members and will rejoice the more if these additions shall make the Board more useful.

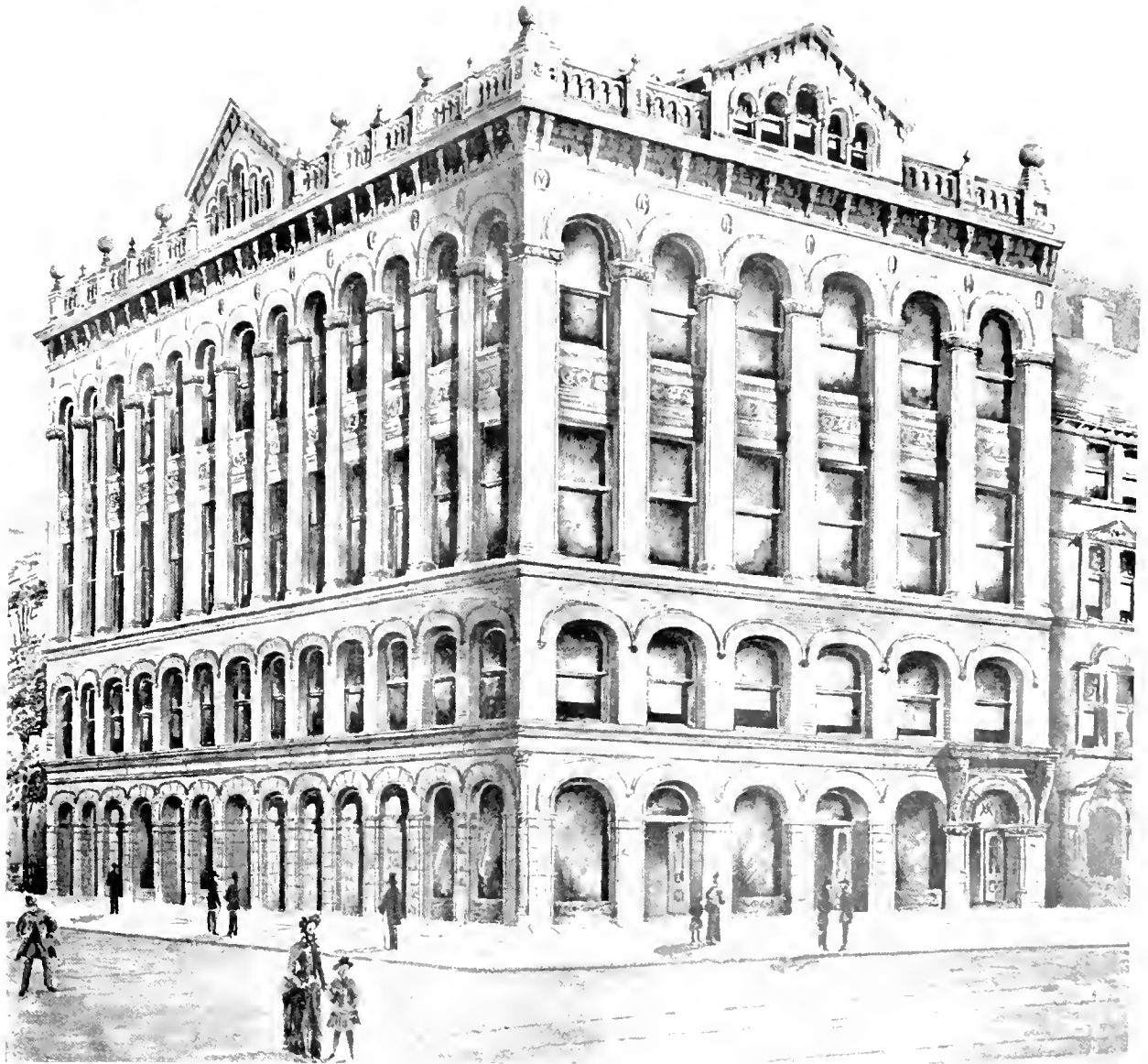
In this little review of the past I have confined myself entirely to the more sober matters of business which have indeed mainly occupied the attention of the Board, but there has also been a lighter side, where the more pressing realities of the work day world have been laid aside and we have indulged in those social gatherings, where, though the main object of the Board was not lost sight of, it was for the time being only an accompaniment to the pleasures of the social season. It is my purpose only to allude to these episodes. The character of them may be found reported, in more or less full degree, in the annual reports.

Shall I stop here or shall I indulge in the saddened thought which comes with remembrance of those who were with us in former years but now "are not?" To the older members come up the names of Barbour and Ryle, the first and second presidents of the Board. Mighty men they were to carry forward whatsoever they deemed worthy of their efforts. With the last of these names comes up the thought of the magnificent gift by his widow of a building for the free public library of this city. May I not name too the clear-headed and reliable Cooke; the thoughtful investigator, Inglis; the ever willing and intelligent Dale; the quiet but sturdy of opinion, Hamil; the ever ready, for work or play, Swinburne? To use the words of the sacred writer, "What shall I say more, for the time would fail to tell" of those large-spirited men of influence, who have so well acted their part, and left us to continue the work.

To those whom we shall so gladly welcome among us hereafter, as fellow-helpers, may we not ask that they think over the work which has been done in the past and of which these lines are only an inadequate memorial, and they determine that whatever may have been done in the past shall be exceeded in the future? The world is constantly widening and the opportunities for doing good to others ever multiplying. It is only the few who are willing to work for man as man; be a part of that few. Let him consider the problems of life which surround him on every hand. Let him enter into some of the noble enterprises for the benefaction of the race and do his part towards the improvement of those immediately around him. He will then be a good member of the Board of Trade.

PUBLIC BUILDINGS, BANKS, BUSINESS HOUSES, &c.

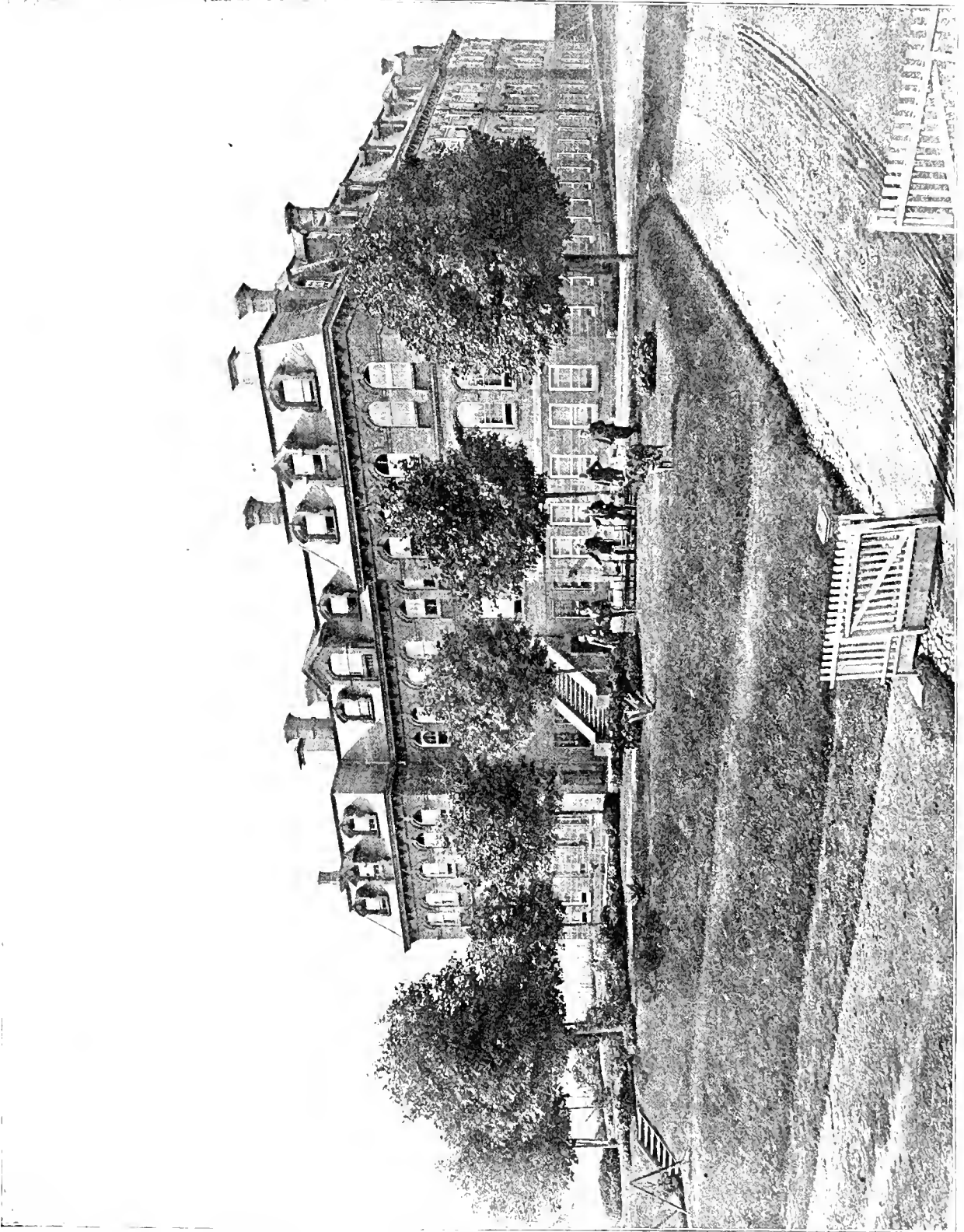
ALL THE ILLUSTRATIONS IN THIS VOLUME WERE FURNISHED BY THE
PHOTO-ENGRAVING COMPANY, 67-71 PARK PLACE, N. Y.



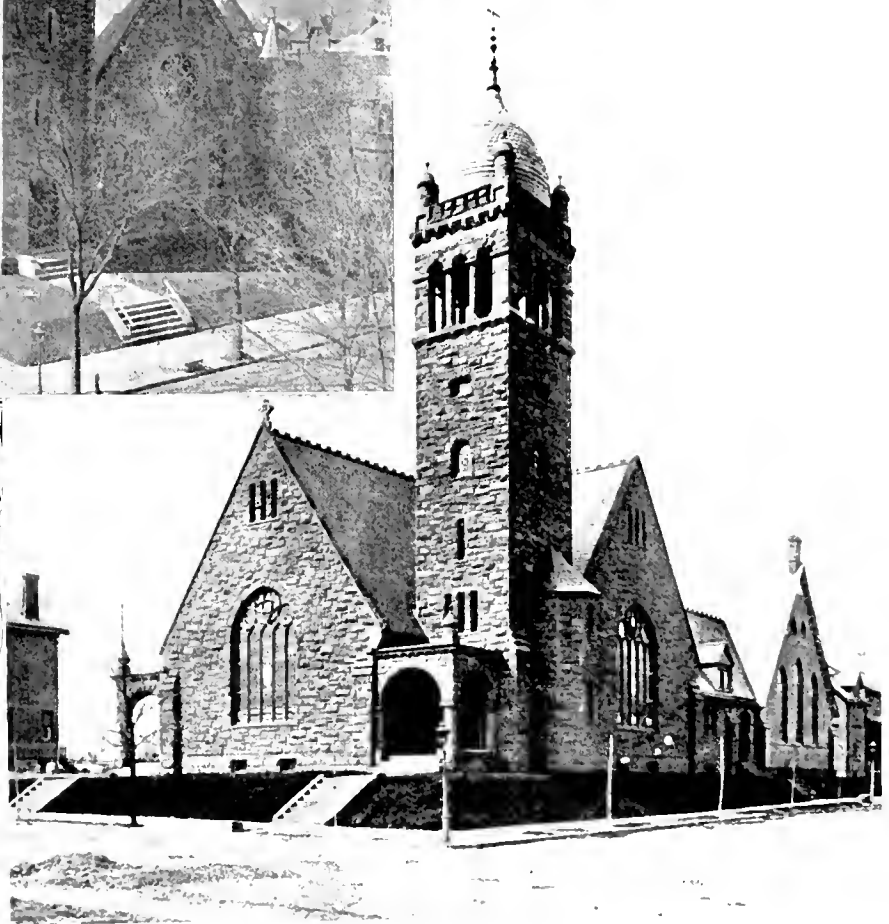
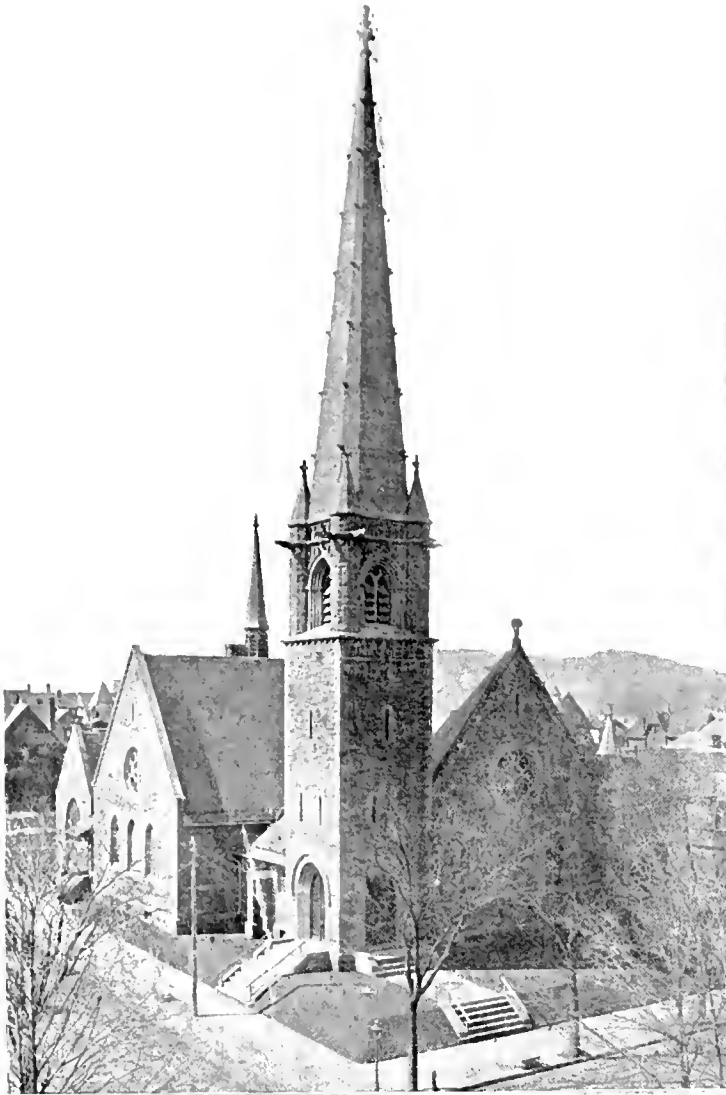
MASONIC HALL.



THE FREE PUBLIC LIBRARY.

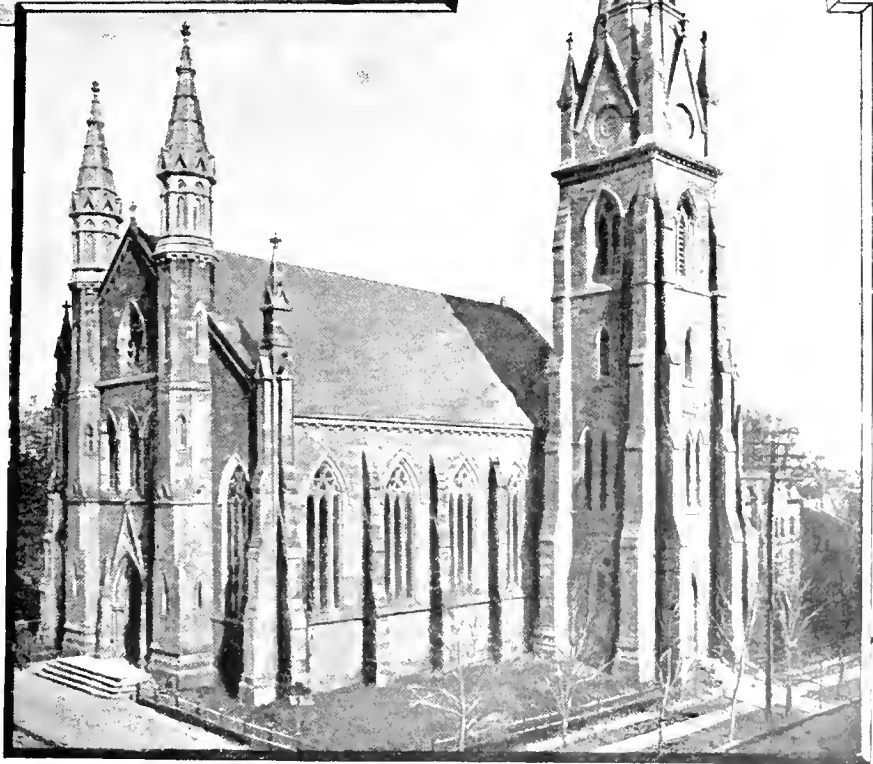
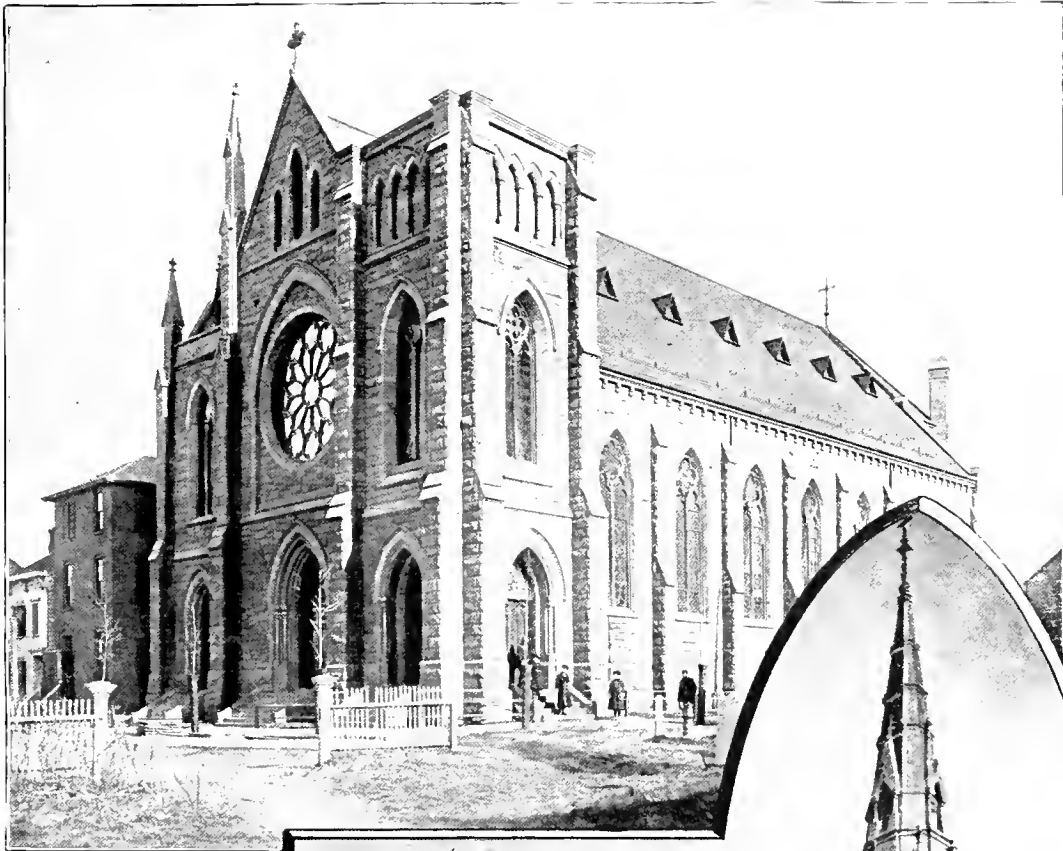


THE CITY ALMS HOUSE.



CHURCH OF THE REDEEMER.

EASTSIDE PRESBYTERIAN CHURCH

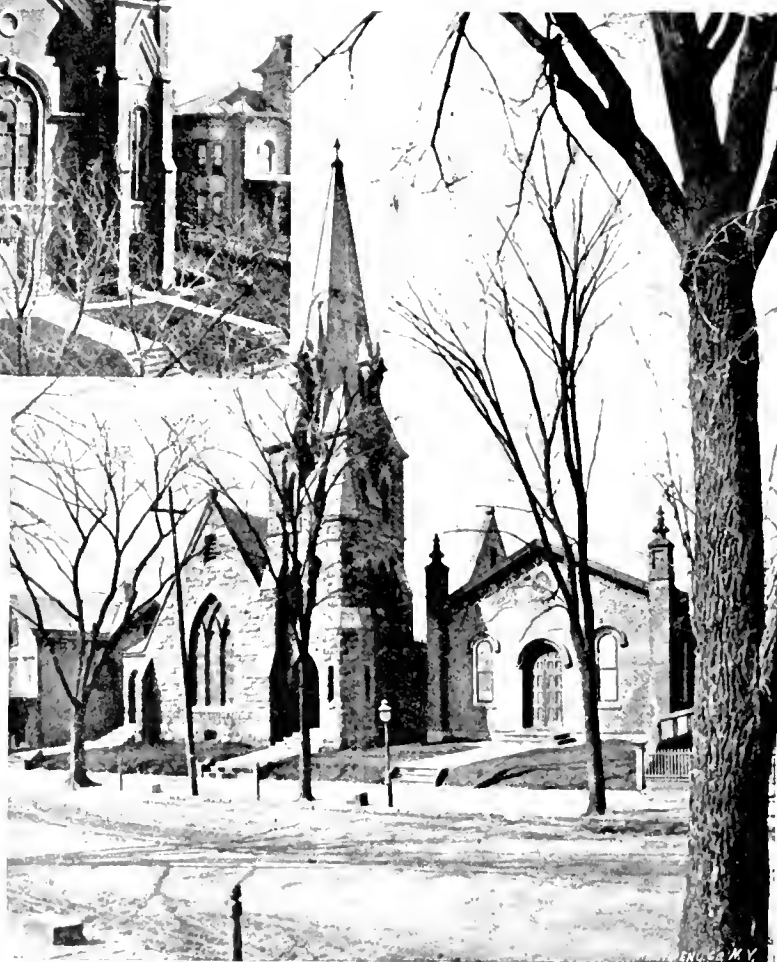


ST. JOSEPH'S CATHOLIC CHURCH.

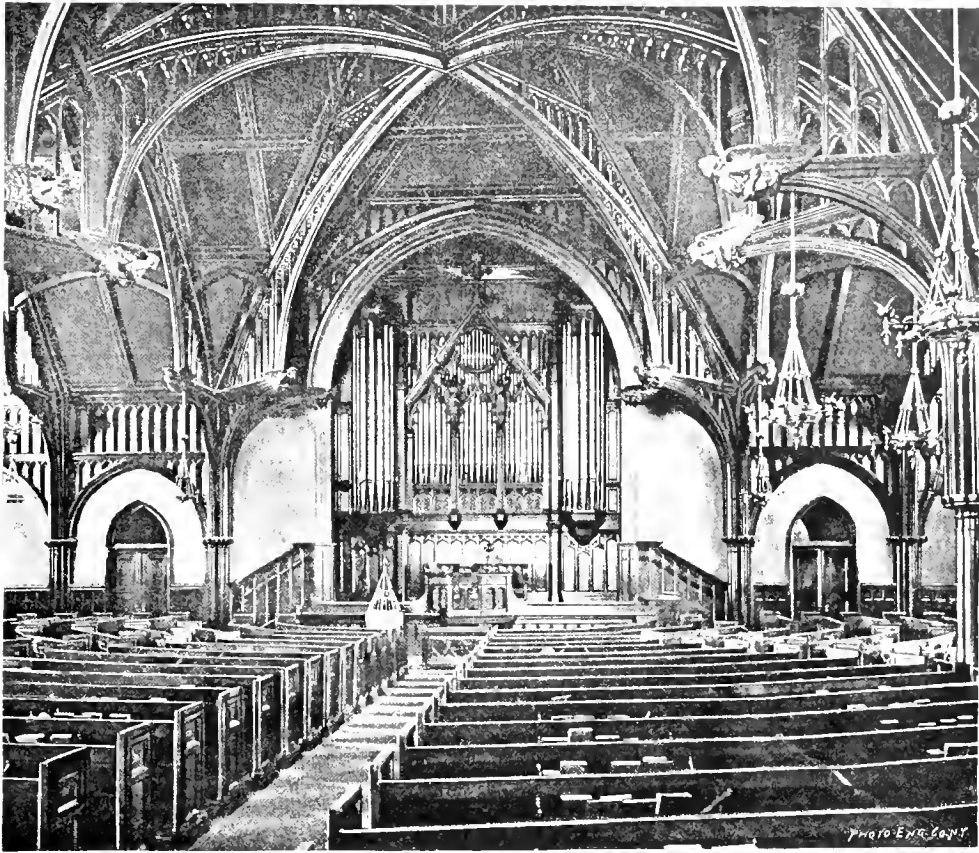
ST. JOHN'S CATHOLIC CHURCH.



DIVISION ST. REFORMED CHURCH.



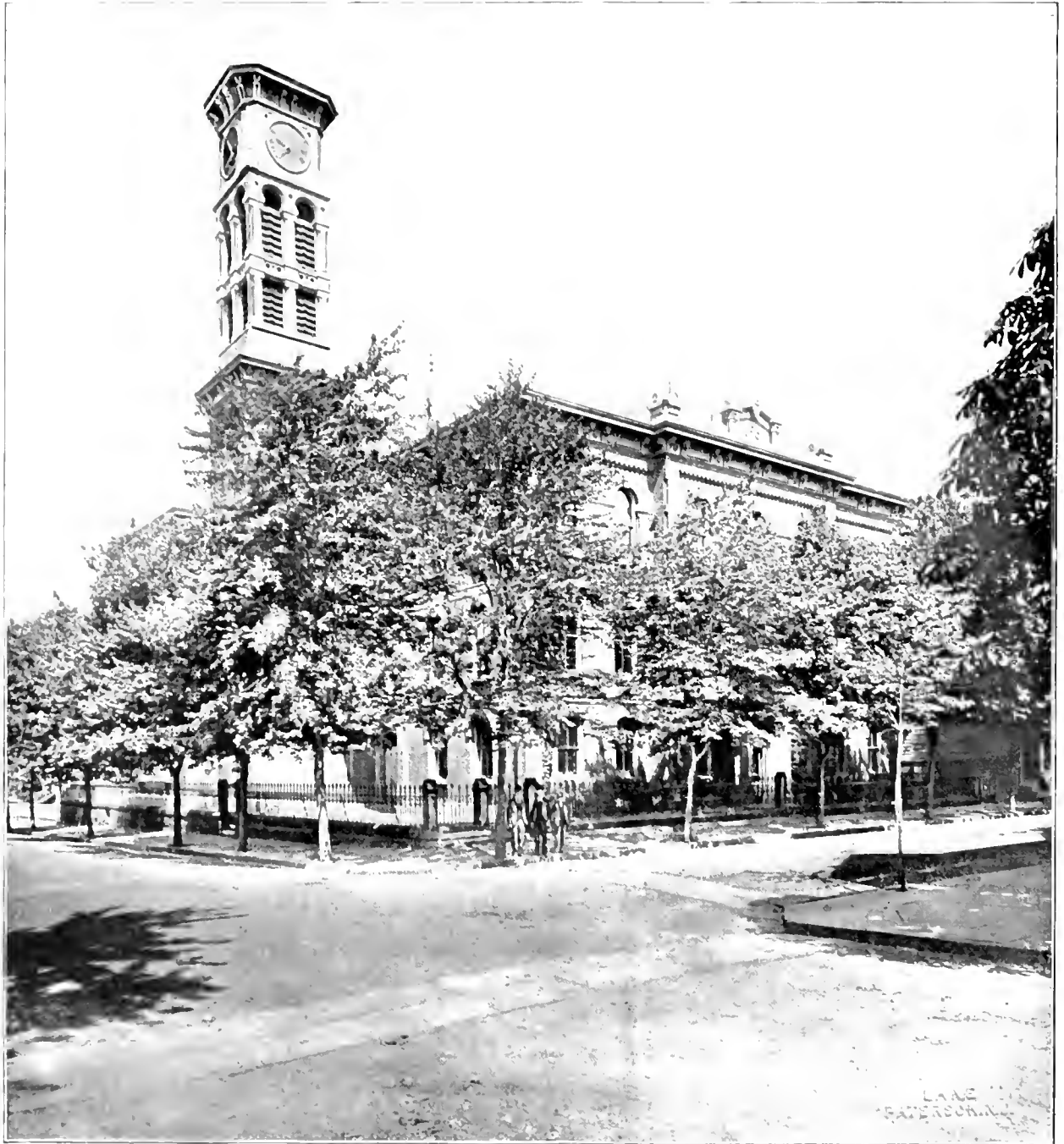
BROADWAY REFORMED CHURCH.



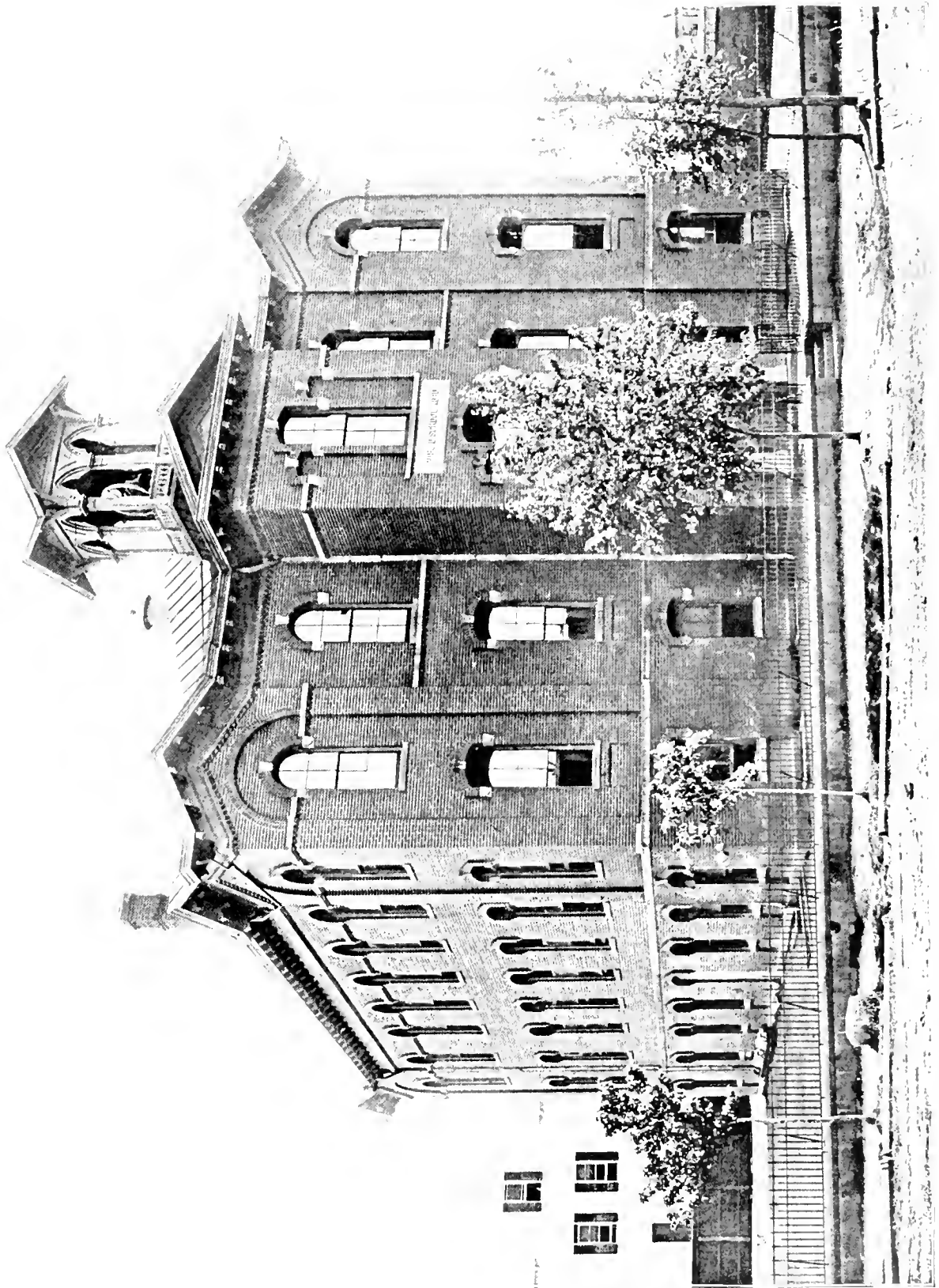
INTERIOR OF THE CHURCH OF THE REDEEMER.



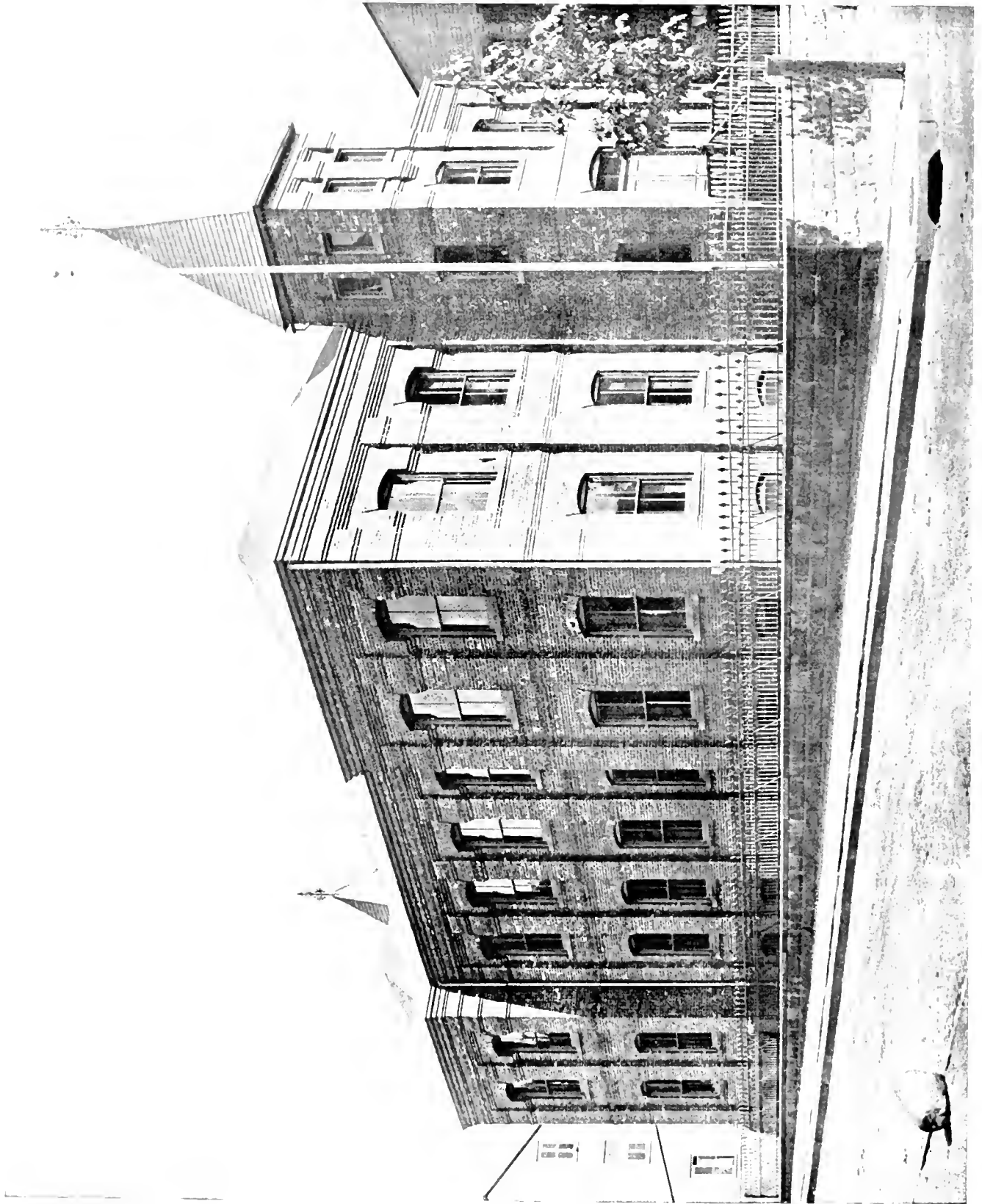
INTERIOR OF ST. JOHN'S CATHOLIC CHURCH.



PUBLIC SCHOOL NO. 6



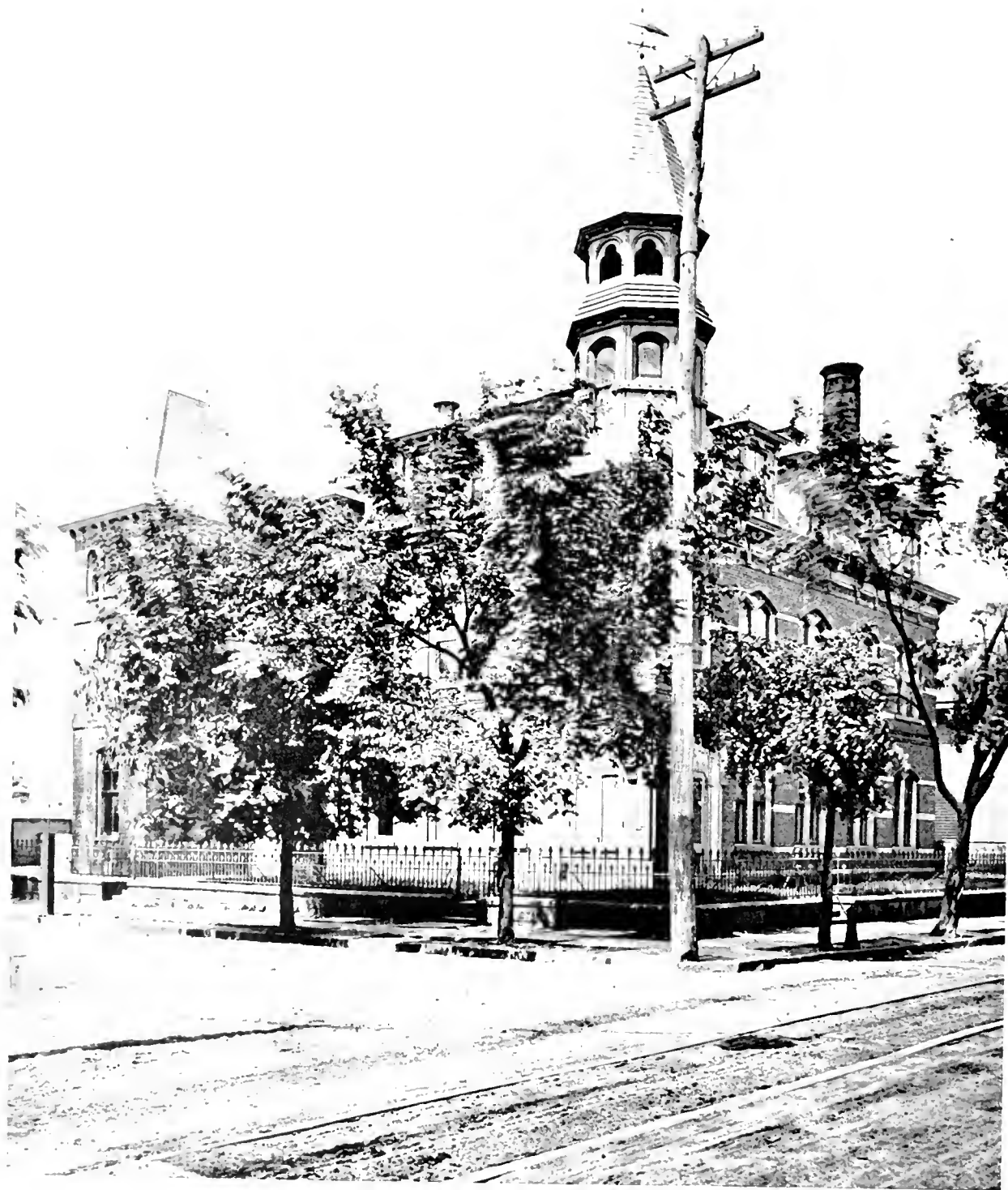
PUBLIC SCHOOL NO. 10.



PUBLIC SCHOOL NO. 11.



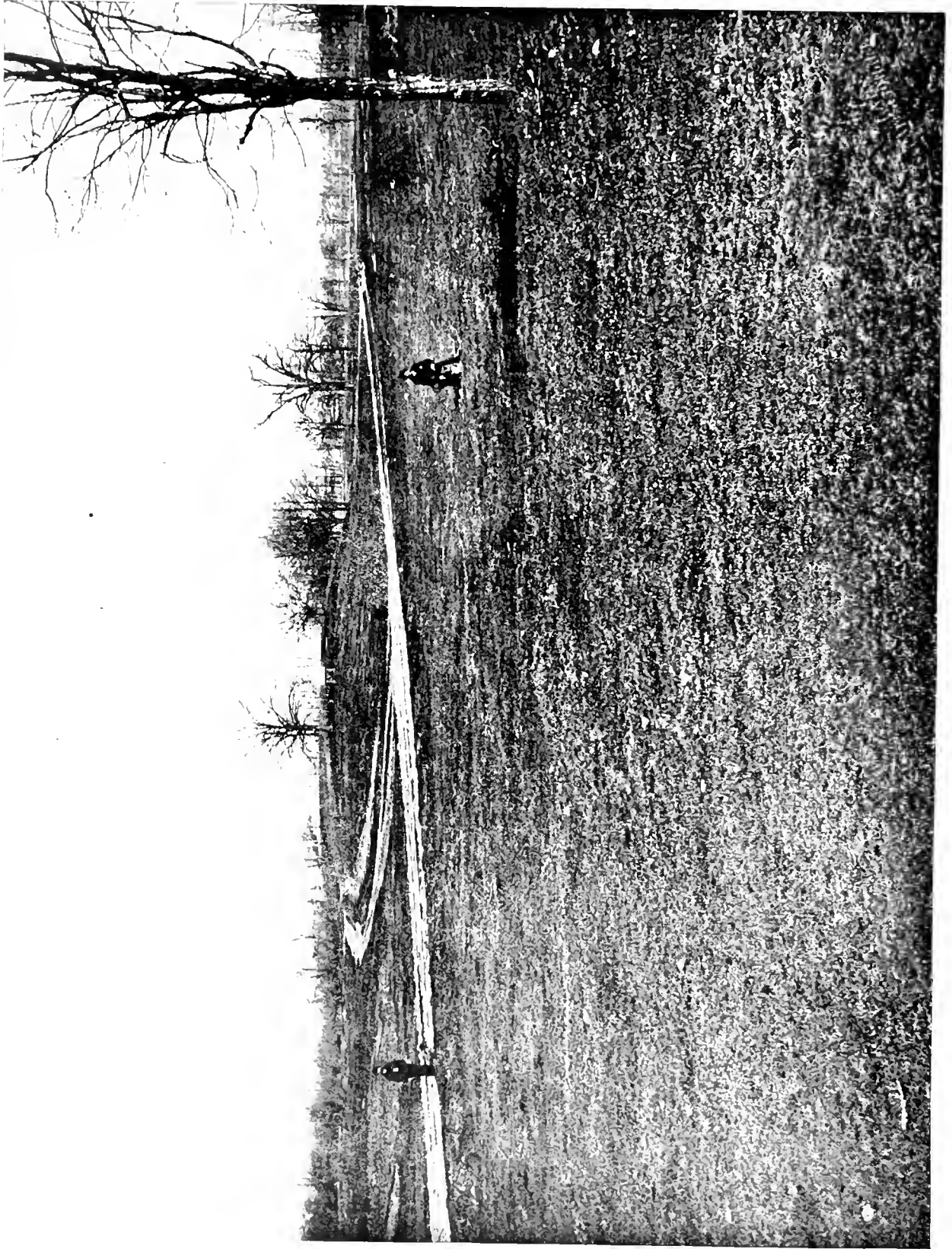
PUBLIC SCHOOL NO. 9.



PUBLIC SCHOOL NO. 5.



PUBLIC SCHOOL NO. 2.



CHESTNUT HILL.



FIRST NATIONAL BANK.



SECOND NATIONAL BANK.



PATERSON NATIONAL BANK,



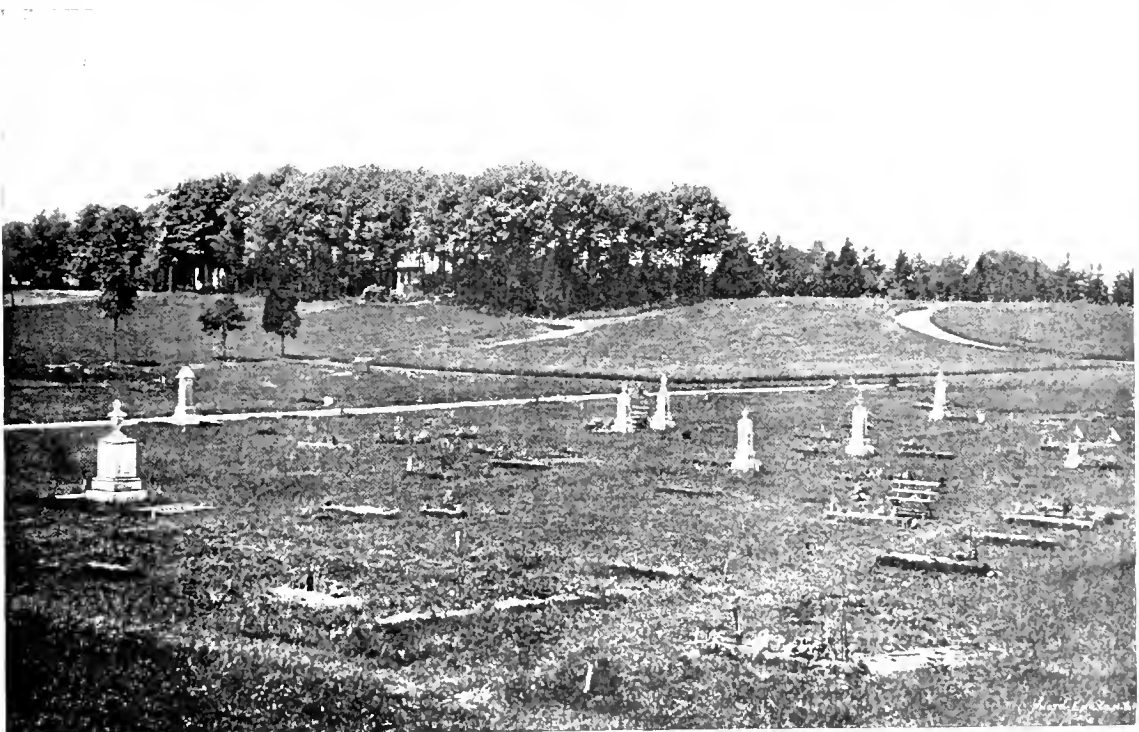
ENTRANCE TO CEDAR LAWN CEMETERY.



VIEW IN CEDAR LAWN CEMETERY.



ENTRANCE TO LAUREL GROVE CEMETERY.



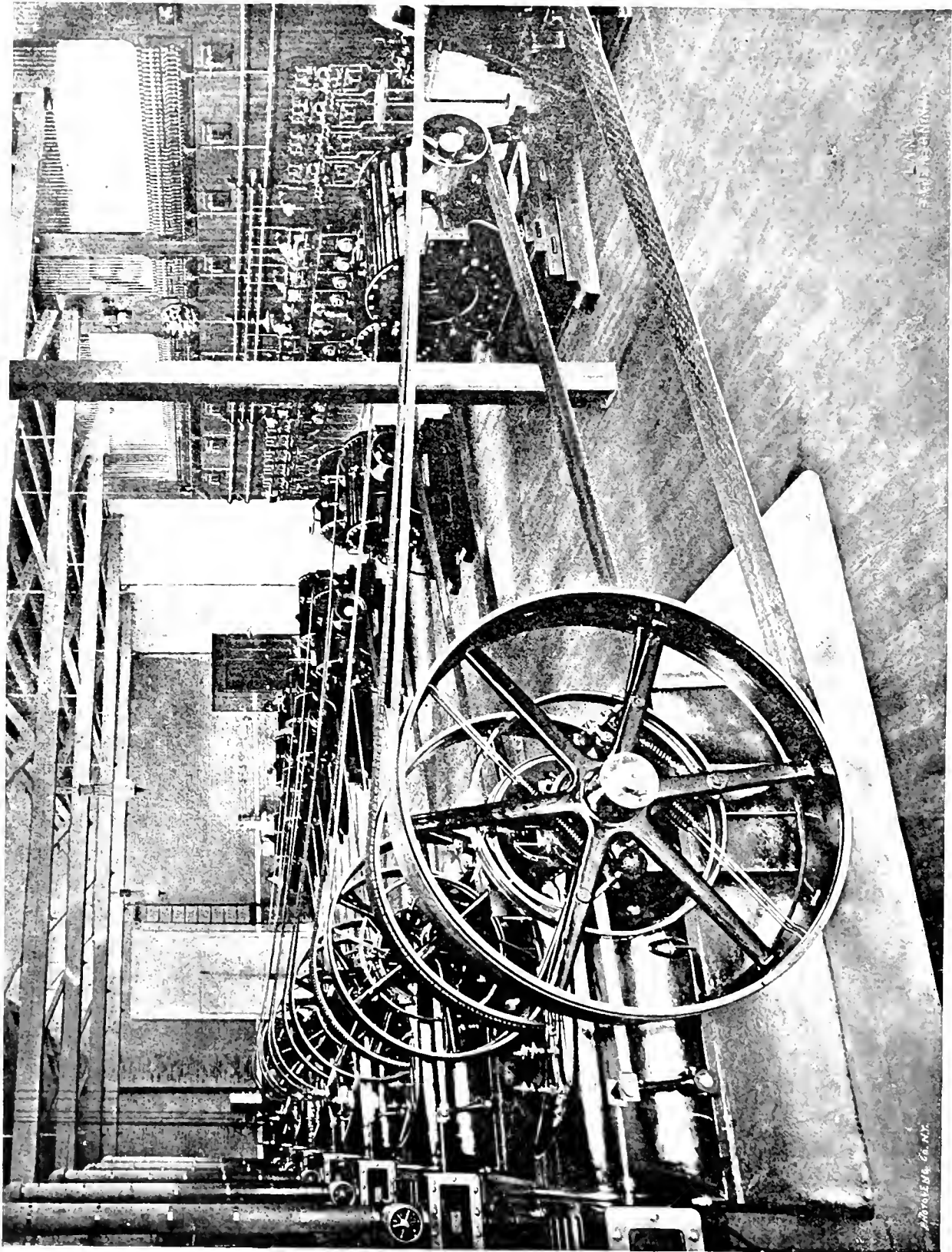
VIEW IN LAUREL GROVE CEMETERY.



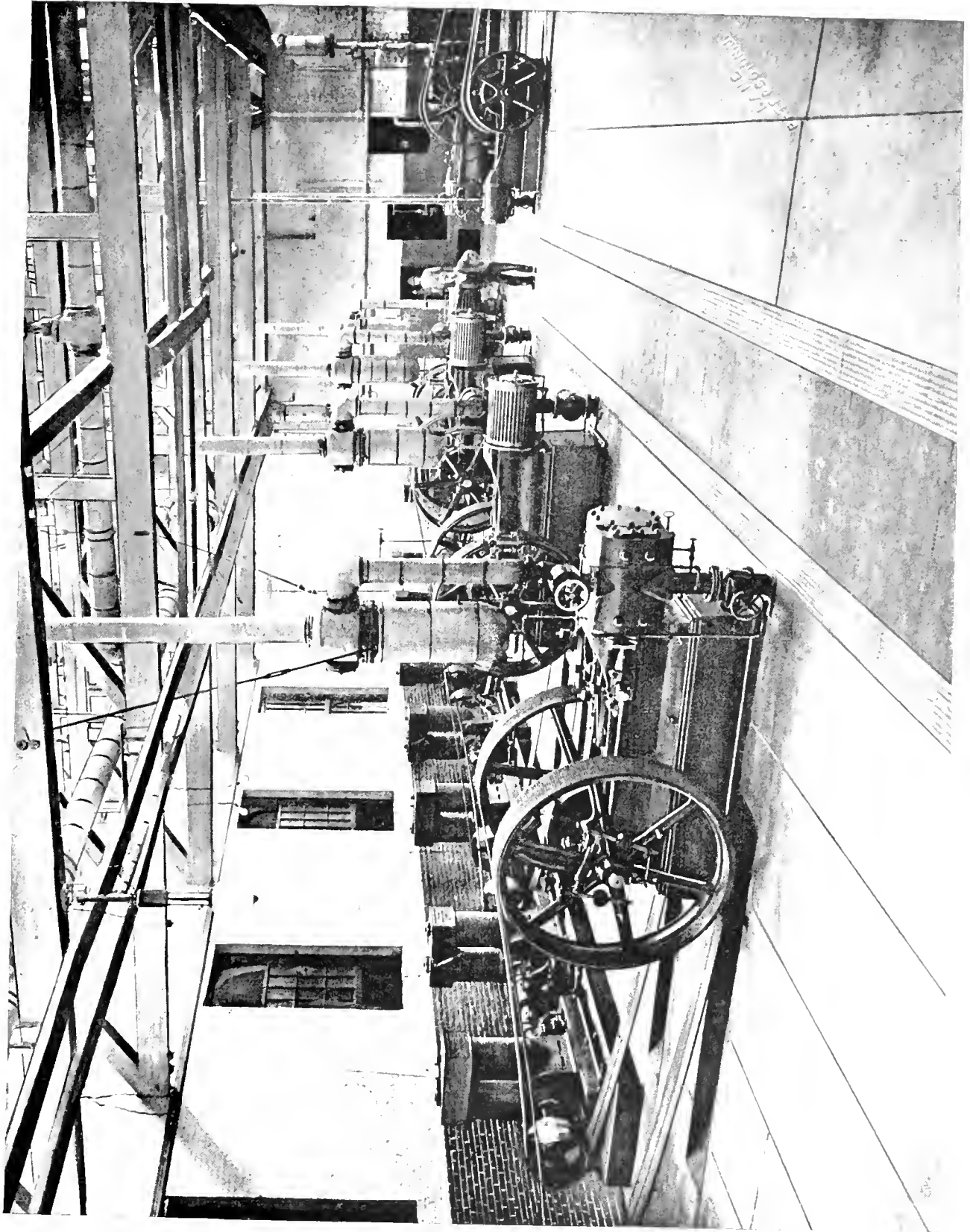
MARSHALL & BALL'S CLOTHING HOUSE.



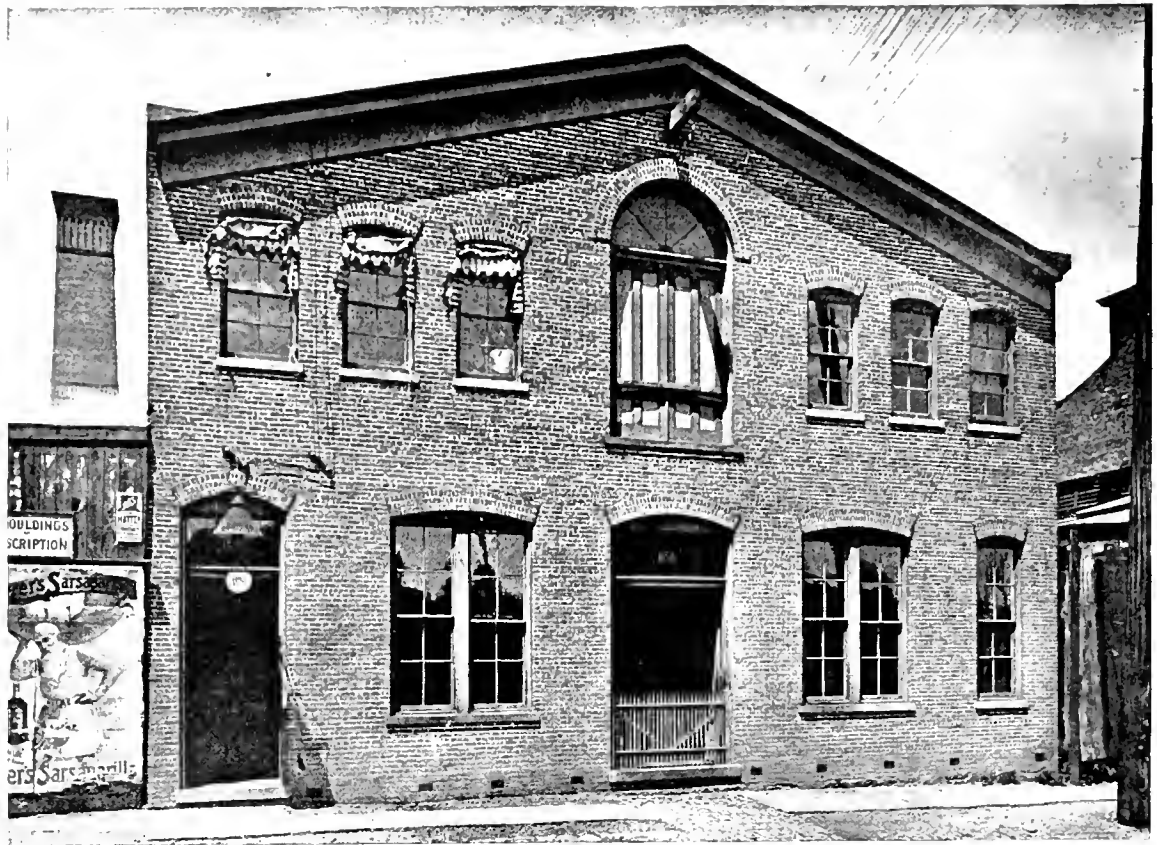
THE BELL BUILDING.



INTERIOR OF THE PATERSON ELECTRIC LIGHT COMPANY'S WORKS.



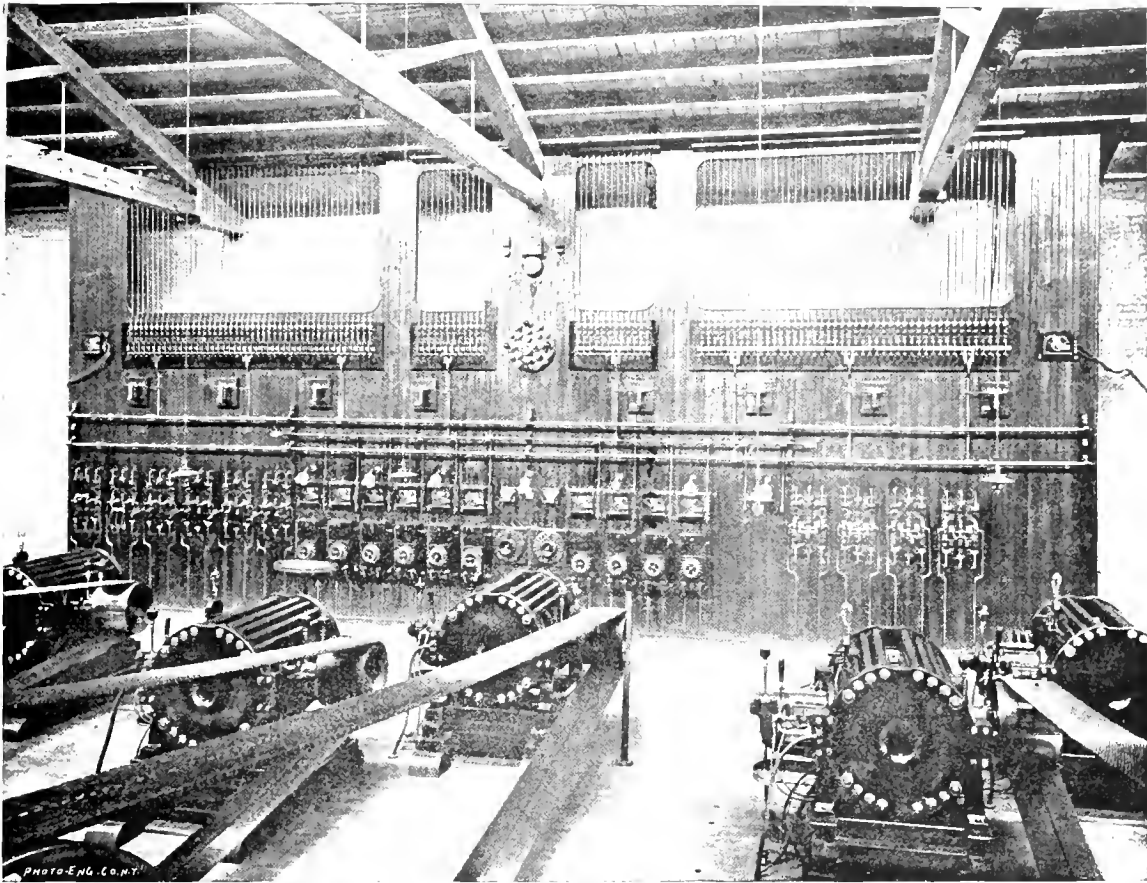
INTERIOR OF THE EDISON ELECTRIC ILLUMINATING COMPANY'S WORKS.



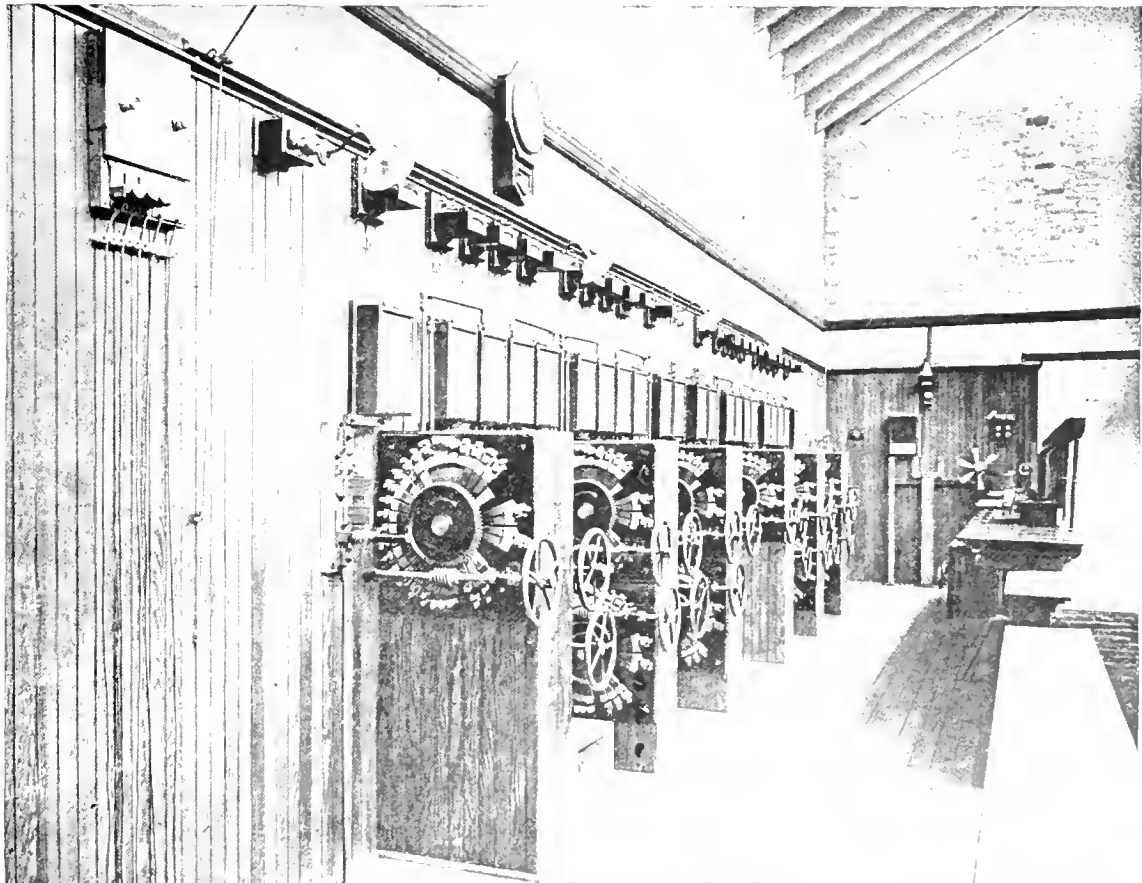
EXTERIOR OF THE PATERSON ELECTRIC LIGHT COMPANY'S WORKS.



EXTERIOR OF THE EDISON ELECTRIC ILLUMINATING COMPANY'S WORKS.



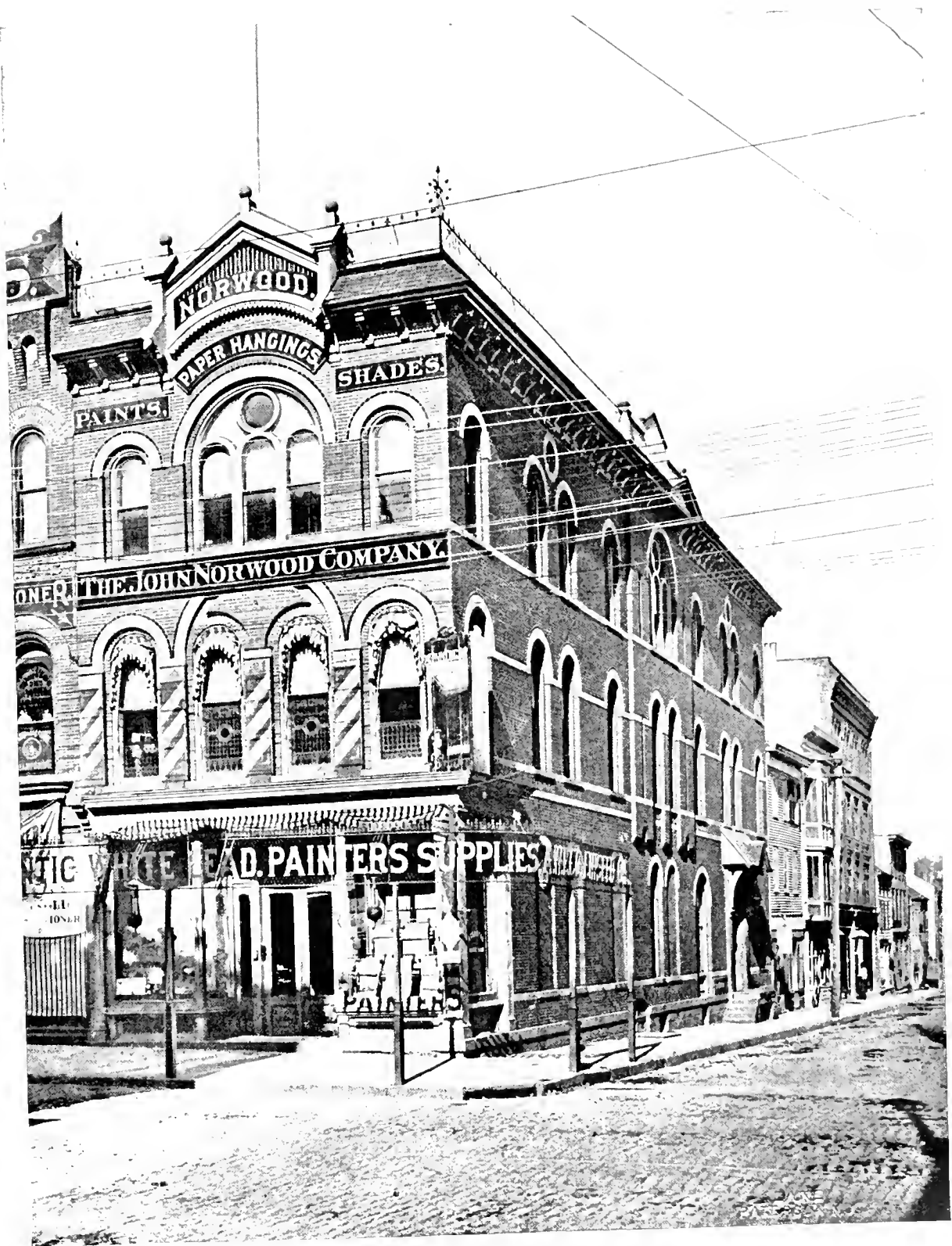
SWITCHBOARD OF THE PATERSON ELECTRIC LIGHT COMPANY'S WORKS.



SWITCHBOARD OF THE EDISON ELECTRIC ILLUMINATING COMPANY'S WORKS.



LOCKWOOD BROTHERS' FURNITURE STORE.



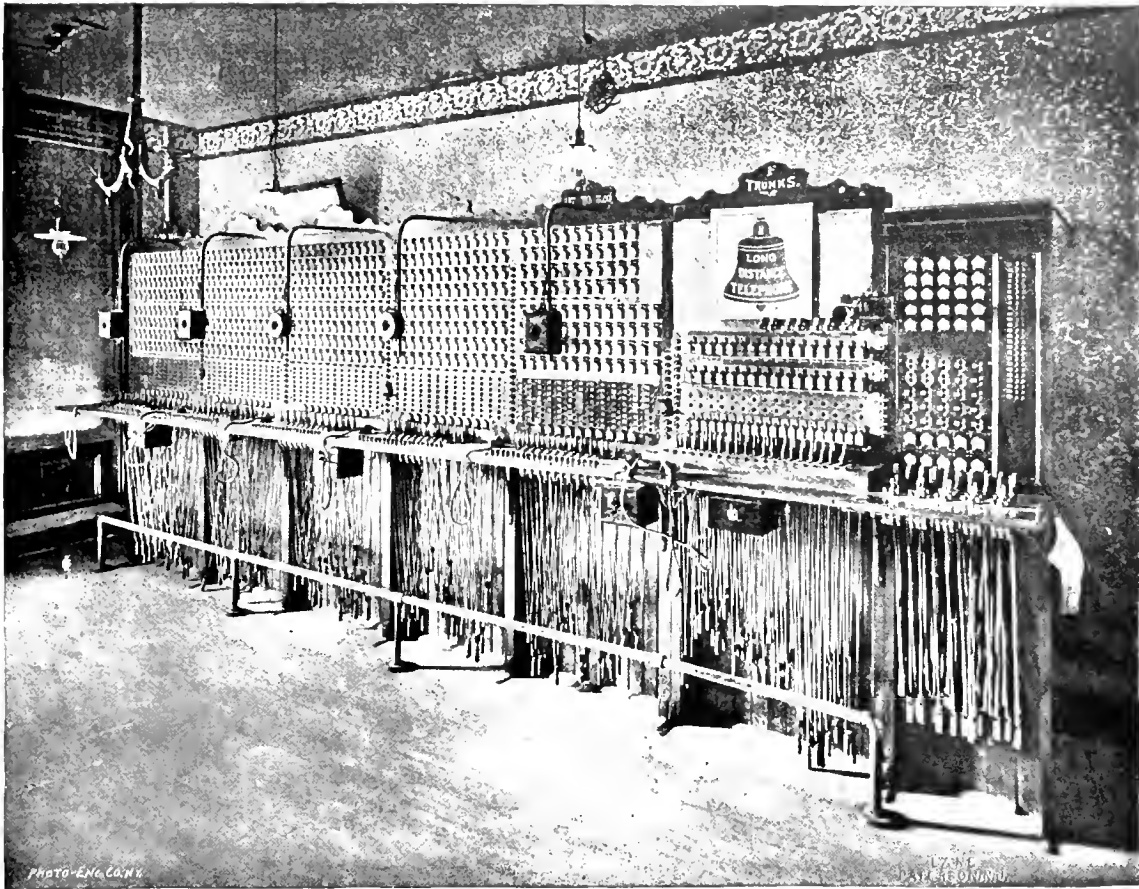
THE JOHN NORWOOD COMPANY'S PAINT STORE.



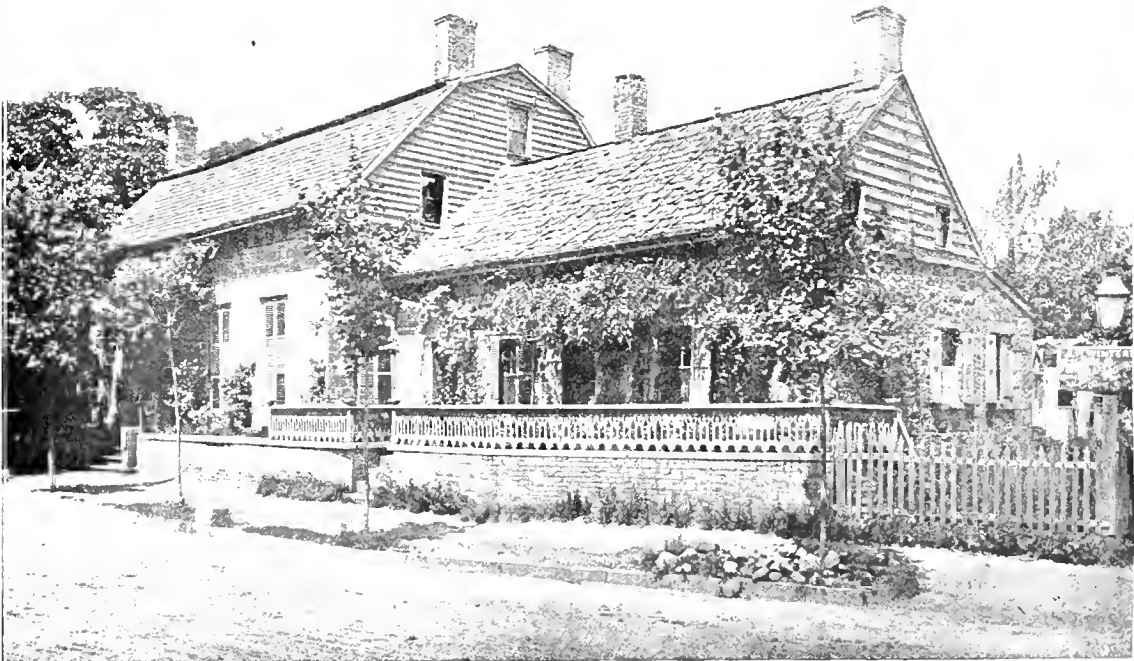
MEYER BROTHERS' DRY GOODS STORE.



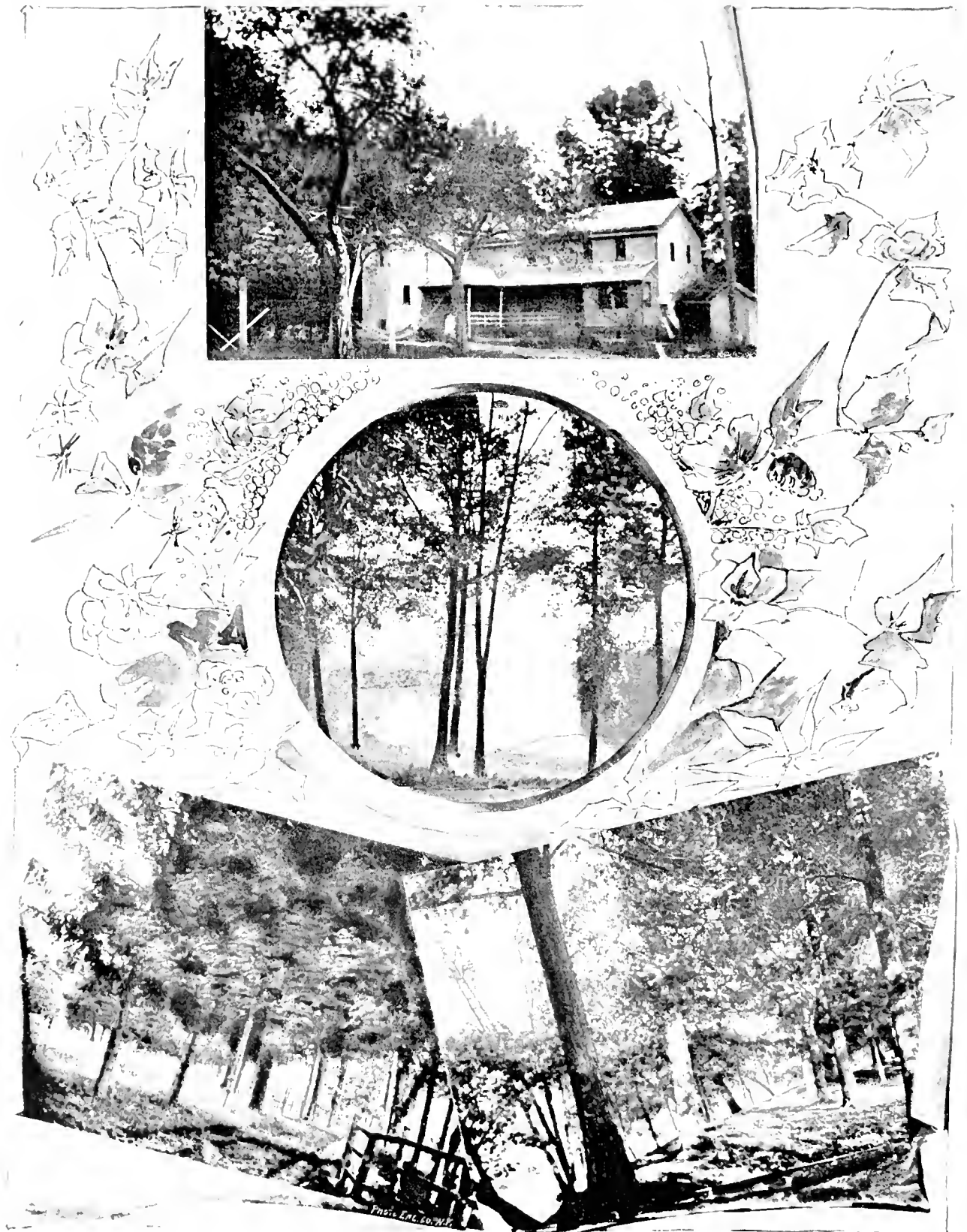
THE HOBART-STEVENSON BUILDING.



SWITCHBOARD OF THE NEW YORK & NEW JERSEY TELEPHONE COMPANY.




THE DOREMUS HOMESTEAD.



GLENWOOD OR RYLE'S PARK.

The Free Public Library.

By Mr. GEORGE WURTS, Editor of The Daily Press.



THE Free Public Library is an institution that the people of Paterson regard with peculiar pride, not only for the benefits which flow from such a fountain of culture and enjoyment to all cities fortunate enough to possess one, but because it was the first entirely free public library established in New Jersey. Many attempts had been made in the earlier history of the town and city to found libraries partaking more or less of a public character, with the usual experience in such cases. Being limited in scope, unendowed, and depending on ephemeral sources of support, these enterprises one after another flickered out their feeble lives. In the year 1884 the Hon. William Prall, then a talented member of the Passaic County Bar, but who has since taken orders in the ministry of the Protestant Episcopal Church, was a member of the House of Assembly of the New Jersey Legislature. Mr. Prall had long been a zealous advocate of culture among the masses and had labored diligently to lead the minds of his fellow citizens in the direction of the organization of a free public library. The opportunity for which he sought was opened by his position as a member of the Legislature, and he gave much thought and study to an effort to mature a law under which his own city at least—if not all the cities of New Jersey—could become the happy possessor of a library free to all. Others had done good work to the same end, and one of these attempts especially deserves to be remembered. In 1883, a year before Mr. Prall framed his bill, the Hon. P. H. Shields, then a Member of Assembly from this city, had introduced a bill to establish a public library, which was drawn by Mr. William H. Barry, principal of one of our public schools. This bill, though it contemplated making the library a charge on the public treasury, embraced the idea of having it constitute a part of the common school system of the city by putting it under the care of the Board of Education. Hence it was not to be a free public library in the broadest sense. This

bill for some reason failed to become a law, but it merits recognition as a well meant effort to accomplish a benign purpose, and it undoubtedly pioneered the way for the Prall bill of the following year. The latter, as stated by its author, had a three-fold purpose: "To form a perfect and distinct corporation, to tie it to the city and public school system, yet not to place it under municipal authority, and to keep the library forever out of the play of party politics." This bill is said to have been different from the law for the formation of public libraries in any other State. In its preparation Mr. Prall received valuable suggestive aid from the Hon. John W. Griggs, then State Senator from Passaic County and a devoted and judicious champion of education and public culture. The act as passed was very simple in its terms. It vested the management of the library when created in a board of seven trustees to be appointed by the Mayor, in which the municipal boards should always be represented by the Mayor and Superintendent of Public Instruction as members *ex-officio*. The actions and responsibility of this Board of Trustees are entirely within themselves, subject to no control or dictation from any other source whatever. By the law the Board of Aldermen is required every year to provide in the tax levy for a sum equal to one-third of a mill on every dollar of taxable property, which sum the City Treasurer is required to pay over to the public library trustees on draft of their President. It will be seen that the income thus provided is not only secure, but it must regularly increase with the growth of the city. The act was not to be operative until approved by a majority of all the voters at the first municipal election held after its passage, which was that of the Spring of 1885. Careful steps were taken to secure the placing of the library option on all the party tickets used, and to arouse public sentiment in support of the project, through the press of the city, which gave its united and cordial aid. The result was that the vote was practically unanimous in acceptance of the law. Thus its somewhat peculiar provisions received a popular sanction

so emphatic as to remove all fear of its disturbance in the future. The income of the library the first year was about \$7,000, supplemented by some \$5,000 raised by subscriptions and applied to the purchase of books. Its appropriation from the city was over \$8,000 the past year. It is entirely safe to say that no money raised for taxes by the citizens of Paterson is paid more cheerfully than that which goes to the support of the Free Public Library. It is also interesting and important to state that the addition of that tax has really not been felt in the smallest degree by any citizen, as it has not been attended by the slightest increase in the tax rate. It is so comparatively small as to be inappreciable in the bulk of the general tax levy. It would perhaps not be strictly true to say that the people of Paterson enjoy their public library without cost, but it is true that they are none of them conscious of any cost. The money is simply saved from some other purpose which does not need nor miss it. Mr. Prall was very properly made one of the first Board of Trustees and elected its President, an office which he held until his removal from the city. The present Board is composed of the following gentlemen:

George Wints,	term expires	1891
Robert A. Haley,	"	1892
Charles Danforth,	"	1893
Elias J. Marsh, M. D.,	"	1894
John H. Hopper,	"	1895

EX-OFFICIO.

Hon. Nathan Barnett,	Orestes M. Brands,
<i>Mayor.</i>	<i>Superintendent of Public Instruction.</i>

Following is the organization of the Board:

<i>President,</i>	Elias J. Marsh, M. D.
<i>Treasurer,</i>	Charles Danforth.
<i>Secretary,</i>	Geo. F. Winchester.
<i>Committee on Finance,</i>	Robert A. Haley, <i>Chairman</i> ; John H. Hopper, Hon. Nathan Barnett.
<i>Committee on Library,</i>	John H. Hopper, <i>Chairman</i> ; Elias J. Marsh, M. D., Charles Danforth.
<i>Committee on Rules,</i>	George Wints, <i>Chairman</i> ; E. J. Marsh, M. D., O. M. Brands.
<i>Library,</i>	Geo. F. Winchester.
<i>Assessors,</i>	Eleanor G. Weller, Lizzie P. Scott, Stella Brands, Chas. P. Longwell.
<i>Reader,</i>	Charles H. Campbell.

The Library is open (except Sundays and legal holidays) from 10 A. M. to 8 P. M., the hour of closing being extended to 6 P. M. on Saturdays. Any resident of the city over 14 can draw books without charge of any kind and under very liberal rules, which are rarely abused. Non-residents can become users of the library by paying one dollar a year. Teachers of the public schools can draw six books each at one time, upon subjects connected with the studies of the school. Seven days and two weeks are the limits of keeping respective classes of books.

The reading room is free to all persons over 14 during its regular hours, on week days, from 6 A. M. to 10 P. M. and on Sundays persons above 18 are admitted from 2 P. M. to 6 P. M. The Library now contains about 13,500 volumes. The reading room receives 23 daily

papers, 93 weekly publications, one tri-weekly, 1 fortnightly, 53 monthly, 3 quarterly—114 in all. The number of books issued from the Library to be taken home was in the past year (1889) nearly 70,000. It has issued as high as 586 in a single day.

For the first five years of its existence the Library was housed in a rented building in Church street. The elegant structure in which it is now installed as its permanent home, of which a cut is given above, was the gift to the City of Paterson of Mrs. Mary E. Ryle, in loving memory of her father, the late Charles Danforth, it having been the residence of that gentleman and falling to Mrs. Ryle by bequest. The value of the real estate was computed at about \$50,000 and Mrs. Ryle not content with this magnificent benefaction supplemented it by paying all the expenses incurred in its remodeling and equipment for the uses of the Library, amounting to some \$15,000 more. Thus the gift of Mrs. Ryle aggregated about \$65,000, the only condition made being that the building itself should be known as the "Danforth Library Buildings," and that a tablet commemorating the name of Charles Danforth should be erected on its walls. This was, indeed, a noble gift to Paterson from this great hearted lady, who is known through the whole city for many liberal but unostentatious acts of generosity. It is the first, but it is hoped will be by no means the last, strictly public endowment by a citizen of Paterson for the benefit of its people. The Library has only very recently been removed to its new home, which is fitted up with every adjunct for the comfort and convenience of the public that such an institution can have. In the handsome entrance tower is a superb illuminated clock, with two faces, the liberal gift of Mr. William T. Ryle, a son of Mrs. Mary Ryle. In the vestibule of the tower stand two statues to which attaches great interest. They are of brown stone and form part of a group representing Tam O'Shanter and his companions, carved many years ago by the sculptor Thom. Two of this group of four statues were lost at sea, while the others were purchased by Mr. Roswell L. Colt. For fifty years they stood in the porch on either side the door of his mansion on "Colt's Hill," and were familiar figures to all the old residents of the city. They were presented to the Library by Mr. Morgan G. Colt and his sister, Mrs. De Grasse B. Fowler, and President Marsh well said in his annual report for 1884: "This gift was very highly appreciated by the Trustees both on account of the artistic value of the works and also for their association with the past history of Paterson and with one of its leading citizens." Another gift of special value made to the Library during the past year was one of about seven hundred large photographs presented by Mr. John Green. About three years ago Mr. Green retired from business and left Paterson for a protracted trip around the world. On his journey he gathered photographs representing the scenery, habitations, monuments and customs of the countries and nations which he visited, and on his recent return home had these photographs properly mounted and arranged,

and then he presented them to the Library. They fill fourteen portfolios, and represent views in China, Japan, Australia, India, Egypt, Turkey and the Holy Land, the Azores and Madeira and several states of Europe. This collection of photographs is of very considerable value, and will undoubtedly be highly appreciated by the visitors to the Library as soon as it is made available. The trustees were very glad to receive these gifts of art treasures, as they cherish the hope that they may at no distant day collect many similar objects, and establish a museum and art gallery to add to the attractions and the educational value of the Library. They are especially de-

sirous of collecting and preserving objects and relics that will be interesting from a local point of view.

The number of card holders of the Library is now about 9,000. Its operations have been much hampered by want of room, but now that it is housed in its elegant new quarters it is expected that its business will largely increase in all its departments, which have hitherto been constantly taxed to their utmost capacity. In Mr. George F. Winchester the Board possesses a Librarian whose fitness for the important and responsible post is rare indeed. Cultured, experienced, genial and indefatigable, he is clearly "the right man in the right place."

Banking Institutions.

THE FIRST NATIONAL BANK.

This institution was organized in the early part of 1864, being among the first established in the United States under authority of the then National Currency Act. The bank was opened for business in May of that year, with a subscribed capital of \$100,000, of which \$30,000 was paid in. William Gledhill was elected President and George M. Stimson Cashier. Doubtless the intent of the originators was that the institution, while of a semi-public character and affording all the protection to the public, and advantages within the limits of the National Currency Act, was intended as a private institution. Failing health on the part of Mr. Stimson, the Cashier, and owner of most of the capital stock, coupled with a very limited business, and no doubt largely influenced by the fact that the institution was personal in its character, induced the directors upon the acceptance of the resignation of Mr. Stimson in July of that year, to Resolve, "That the association go into liquidation, and be closed on and after August 1, 1864." Thus it will be observed that the city of 20,000 inhabitants with its already too limited financial facilities, was about to be deprived of an institution, which though small could prove no less than a misfortune.

At this important moment in the financial history of Paterson Mr. John J. Brown, then a leading merchant of the city, a man of broad experience, discernment and enlightened judgment, realizing the loss to the city by the closing of the institution, and further, the material benefits to be

derived by the continuance of the bank upon a basis somewhat commensurate with the needs of the community, became interested in securing subscriptions to the capital stock of \$100,000, which after many discouragements was accomplished and the bank with a somewhat hopeful prospect was saved through the personal efforts of Mr. Brown, who at the reorganization in 1864, was unanimously elected President, which office he has continued to fill for now over twenty-six years to the satisfaction of his associates; the stockholders and all who have had occasion to transact business with the institution.

The bank was formally opened to the public September 24, 1864, with the following officers and directors:—John J. Brown, President; Jonathan S. Christie, Vice-President; Edward T. Bell, Cashier. John Cooke, John Reynolds, Henry B. Crosby, John N. Terhune, Henry M. Low, John J. Brown, J. S. Christie, Josiah P. Huntoon, John Swinburne, Patrick Curran, Edward C. May, William Gledhill and George M. Stimson.

The new institution was particularly fortunate in the selection of its cashier. The term fortunate may be permitted here, for aside from being known by Mr. Brown, he had not an acquaintance in Paterson. Mr. Edward T. Bell, who was then elected (and except for a few years in which he was engaged in business in New York has been cashier ever since) was admirably qualified for a position in a bank where the business was, so to speak, to be built up. Although young, having only just passed into manhood, he had had several years experience in the National

Bank at Hackettstown, where he became familiar with all the details of bank work, and he came after being first teller in a bank in Jersey City, to the new work with all the enthusiasm of a young man and more than the usual knowledge of what was required in such an institution from the employees, as well as in all the varied details of the business of a bank.

Few institutions in the country can boast of a career of such uniform prosperity and steady growth. The original charter expired by limitation in 1883. During this period of time, (about eighteen years), dividends have been paid to the stockholders exceeding \$1,000,000; State and United States taxes, \$300,000; leaving a net surplus of over \$700,000.

The charter was extended in 1883 for 20 years. Dividends of 10 per cent. per annum, free of taxes, have been paid for several years past, the aggregate of which amounts to over \$500,000. It is worthy of note that the institution during its existence of over twenty-six years has uniformly paid dividends in January and July of each year.

The capital stock of the bank has been increased as rapidly as the needs of the community seem to warrant, standing now at \$1,000,000, with a surplus and profit account of \$250,000, and a deposit line of from \$1,800,000 to \$2,000,000. Its banking building, the most substantial, imposing architectural structure in the city, was completed in 1871, at a cost of \$1,000,000, now standing on the books of the bank at \$750,000. The banking rooms are large and commodious, being located upon the second floor of the building. The erection of this building has tended to centralize in the immediate vicinity the monetary affairs of the city. In the building are located the Post Office, Western Union Telegraph Company, U. S. Deputy Collector of Internal Revenue, Mr. F. K. McCully, German American Insurance Company, besides many of the prominent lawyers of the city.

The present Board of Directors is composed of Henry B. Crosby, Alpheus S. Allen, James Booth, W. O. Flyerweater, John Reynolds, Garret D. Voorhis, John J. Brown, William Barbour, J. W. Cleveland, Garret A. Hobart, A. W. Rogers, Edward F. Bell, all being gentlemen of character and public spirit, while actively engaged in business.

THE SECOND NATIONAL BANK.

Mr. George M. Stinson and some friends in 1852 organized the Passaic County Bank, under the state laws; the capital of the institution was \$700,000, but in 1853 was increased to \$1,000,000. In February, 1867, the bank passed into the hands of Mr. James Jackson and a few friends, Mr. Jackson holding most of the stock, and being the president of the bank; David Bunnet was cashier for many years and held that position until his death. In

1871 the bank was reorganized under the National Banking Act and the name of the Passaic County National Bank was assumed. The capital stock was increased to \$1,500,000 and the bank was opened for general banking purposes, having until that time been virtually a private bank. A number of new directors were elected and the business of the institution soon began to assume considerable proportions. On July 1, 1874, Congress passed a special act changing the name of the institution to the Second National Bank of Paterson and it has since done business under that name. A few years ago it acquired possession by purchase of the building in which it is located. The management of the bank has always been conservative and its semi-annual dividends of four or five per cent. come around with the regularity of the tide. It has a surplus of \$750,000 and an ever increasing line of deposits amounting at present to about three-quarters of a million of dollars. Its board of directors is composed of some of the most enterprising and successful business men of Paterson. Confidence in the ability of its directors and officers has placed the bank among the most popular institutions in the city. The following are the officers of the bank: President, James Jackson; vice president, F. C. Van Dyk; cashier, James W. Row; assistant cashier, William D. Blauvelt; board of directors, James Jackson, F. C. Van Dyk, Peter Doremus, Samuel Nathan, Peter Quickenbush, Charles D. Beckwith, Louis A. Piaget, J. A. Van Winkle.

THE PATERSON NATIONAL BANK.

The Paterson National Bank started into business on the 10th of July, 1880, with a capital of \$200,000, and although in operation but a short time is already doing a most satisfactory business, its volume of deposits having reached between \$500,000 and \$700,000. The institution is established for a general banking business, including collections on Paterson and all points in Northern New Jersey. William Strange is President, H. B. Parke, Vice President and H. C. Knox, cashier. Mr. Strange is as widely known as the American silk industry, being the head of the great silk manufacturing concern bearing the title of the William Strange Company; Mr. Parke, a native of Paterson, acting head of the new banking institution, is identified with her industries, and is also largely experienced in banking business through his connection for twenty-two years with the National Broadway Bank of New York city. Mr. Knox also possesses eminent fitness for his important and responsible position through his long experience in financial operations in New York city, where he was formerly Assistant National Bank Examiner. He is a nephew of Hon. John Jay Knox, for twenty years United States Comptroller of the Currency. The Board of Directors is composed as follows: Robert Bar-

hour, President Barbour Flax-Spinning Co.; John W. Griggs, lawyer; John S. Cooke, President Cooke Locomotive and Machine Co.; William Barbour, of the Barbour Bros. Co.; F. W. Allen, Samuel J. Watson, of Watson Machine Co.; Watts Cooke, President Passaic Rolling Mill Co.; Wm. Strange, Wm. T. Ryle, silk importer; Samuel V. S. Muzzy, Harwood B. Parke, Henry C. Knox. The stock of the institution is well distributed, the shareholders including all classes and all lines of business being represented, which renders the new financial enterprise exceedingly popular in the community.

A handsome building is about completed for occupancy by the bank, and for other purposes, at a central location in Market street, one of the principal business arteries of the city. The building is 46x80, five stories in height and practically fire-proof, the material being mainly iron, stone and brick. The first floor will be occupied as a banking room and is elegantly fitted up in marble, and communicates with a safe deposit vault having accommodation for 600 boxes. The vault is absolutely burglar and fire proof, being furnished with time locks of the latest improved pattern and all the best approved attachments. Safe deposit for silver plate and more bulky articles is furnished in the basement vaults immediately underneath the other, and in connection therewith. The remaining four floors are fitted up in the best manner for occupancy as law offices, etc., the entire building being heated, ventilated, illuminated, furnished with elevators and all modern appliances for convenience and comfort.

THE PATERSON SAVINGS INSTITUTION.

In the early part of 1858 public attention was directed through several articles in the Daily Press, to the needs of a savings bank in the city for the accommodation of a large number of our citizens who were compelled at great inconvenience, as well as risk, to seek such facilities at Newark, Jersey City and New York. The people had so long suffered from the absence of these facilities that the beneficent influences of a well organized savings bank, as well as the material benefits to the community, were seemingly lost to public view. Doubtless the closing of the Paterson Savings Bank a few years prior to this time had a marked influence in deterring the people from assuming the responsibility of organization and management of an institution of this character. The only financial institutions in the city at this time were the First National and the Passaic County National Banks. While these institutions were liberal in their management and fulfilling their mission as banks of discount, interest was not paid on deposits. The need became so pressing for the establishment of an institution which should meet a want of the thousands of our citizens, who sought not only a place of safety for their limited means, but interest upon the same,

that application was made to the legislature of the State for a charter, which had been carefully prepared, somewhat out of the usual form for savings banks in providing a guarantee fund as surety for depositors. The act was passed in April, 1860. The capital of \$100,000 was subscribed by the following persons, who became the first Board of Trustees:—

A. S. Allen, Stephen Allen, John J. Brown, H. B. Crosby, P. Curran, J. S. Christie, A. Derrom, James Dunn, W. W. Fairbanks, J. P. Huntoon, John Hopper, R. Hamil, E. C. May, John Reynolds, John Swinburne, John N. Terhune and Edward T. Bell; Robert Hamil was elected president, Andrew Derrom vice-president and Edward T. Bell secretary and treasurer.

The institution was formally opened at 122 Congress (now Market) street, May 1, 1861. For two years business was continued in this location, the bank being open on Wehnesday and Saturday evenings of each week.

The premises 235 Main street (Congress Hall) were leased and occupied May 1, 1871, after which the bank was opened daily and on Saturday evenings. The charter expired by limitation in April, 1881. The institution had proven not only a great success, but of such incalculable benefit to the people, that the managers unanimously resolved to apply to the State authorities for an extension of the charter, which was granted for the full period of fifty years from April 2, 1881.

Mr. Robert Hamil resigned the presidency in 1876, after serving most acceptably for a period of seven years. Mr. John Reynolds who had served the institution in the honorary position as vice president (succeeding Col. Derrom) was unanimously elected to the vacancy. Mr. Reynolds was one of the promoters of the bank and from the organization to the present time he has been most intimately identified with it, guarding the progress, growth and usefulness with zeal and intelligence.

Mr. Edo L. Merselis was elected secretary and treasurer in the fall of 1872, succeeding Mr. Bell, who had resigned. Mr. Merselis entered the bank as general clerk at its organization. He has therefore been continuously in its service for over twenty years. During this time he has by diligence, courtesy and painstaking care, with his thorough and systematic methods, earned for himself an honorable record as a bank officer.

The present officers are:—John Reynolds, president; Henry B. Crosby, vice president; Edo L. Merselis, secretary and treasurer.

The following exhibit of the institution is taken from the official report to the State, January 1, 1890:—

ASSETS.	LIABILITIES.
Cash \$109,242.46	Due Depositors . . . \$3,558,911.50
U. S. Bonds 252,000.00	Capital stock 80,000.00
Municipal Bonds . . . 1,198,364.18	Surplus 270,610.40
Bonds & Mortgages . . 1,267,046.28	
Temporary loans . . . 1,962,953.46	
Interest accrued 38,715.82	
Real estate 77,600.00	
Furniture and Fixtures . 3,000.00	
\$8,909,521.90	\$8,909,521.90

It is now twenty-one years since the institution was organized. During this period, perhaps the most momentous in the financial history of any county, "crises" upon the bank of greater or less magnitude have occurred during times of local excitement, or anxiety, resulting from commercial or financial revulsions. In all cases every demand upon the bank has been paid on presentation. It has likewise regularly paid interest to depositors in November and May of each year since its organization, the rates being as follows:

May, 1869, to May, 1877,	6 per cent.
May, 1877, to May, 1879,	5 " "
May, 1879, to Nov., 1880,	4½ " "
Nov., 1880, to May, 1886,	4 " "
May, 1886, and since	3½ " "

A more extended idea may be obtained of the beneficent influence of the bank from the following exhibit.

Total amount deposited to May 1, 1890,	\$20,540,000 00
" drawn " " " "	16,940,000 00
Balance on deposit May 1, 1890,	3,600,000 00
Interest paid depositors	1,050,000 00
Number of open accounts	13,017 00
Average amount to the credit of each depositor May 1, 1890,	276 77

Quite recently the managers purchased a site for a building at the corner of Main and Market streets, known as Congress Hall; the plot is regarded as the most eligible, as well as the most valuable in the city, it being about sixty feet on Main street and one hundred feet on Market street. The price paid was over \$75,000. It is the intention of the managers to commence the construction of a building during the present year, which when completed will enable the institution to enjoy much needed additional accommodations and doubtless it will become the most striking architectural as well as the most elegant building in the city.


The board of managers consist of the following well known citizens:

John Reynolds,	G. A. Hobart,
G. D. Voorhis,	Edward T. Bell,
John Hopper,	E. B. King,
John J. Brown,	John H. Reynolds,
John H. Robinson,	W. H. Williams,
William L. Williams,	A. S. Allen,
Henry B. Crosby,	James Atkinson,
	Edo L. Merselis,



Land Titles in Passaic County.

By WM. NELSON, Attorney-at-Law and Corresponding Secretary of New Jersey Historical Society.

HE origin of the land titles in any locality, while usually interesting from an historical point of view, is of great practical value to the would-be purchaser of real estate, who is often deterred from investing by the discovery of unexpected difficulties in tracing the title to the land desired.

The statutes of New Jersey provide that "no person who now hath, or hereafter may have, any right or title of entry into any lands, tenements, or hereditaments, shall make any entry therein, but within twenty years next after such right or title shall accrue; and such person shall be barred from any entry afterwards; provided always, that the time during which the person who hath or shall have such right or title of entry, shall have been under the age of twenty-one years, or insane, shall not be taken or computed as part of the said limited period of twenty years." The law further provides that "every real, possessory, ancestral, mixed or other action, for any lands, tenements, or hereditaments, shall be brought or instituted within twenty years next after the right or title thereto, or cause of such action shall accrue, and not after; provided always, that the time during which the person who hath, or shall have such right or title, or cause of action, shall have been under the age of twenty-one years, or insane, shall not be taken or computed as part of the said limited period of twenty years." Hence, twenty years' quiet possession of a tract of land is accepted generally as evidence of perfect title, and very few lawyers or conveyancers ever extend a search beyond that period.

Mortgages on which no interest has been paid for twenty years are presumed to have been paid. Judgments are good only for twenty years, unless the defendant removes from the State, in which case the period of his absence is not included within the twenty years.

As there may be cases where the statute of limitations does not run, as in the cases of minor heirs, absent defendants, and others, the law goes further to protect the title of the occupant of lands, and provides "that sixty years' ac-

tual possession of any lands, tenements, or other real estate, uninterruptedly continued by occupancy, descent, conveyance or otherwise, in whatever way or manner such possession might have commenced, or have been continued, shall vest a full and complete right and title in every actual possessor or occupier of such lands, tenements, or other real estate, and shall be a good and sufficient bar to all claims that may be made, or actions commenced by any person or persons whatever, for the recovery of any such lands, tenements, or other real estate."

The title to all lands in the State of New Jersey is derived ultimately from King Charles II. of England, who by royal patent, dated March 12, 1664, conveyed New Jersey, New York and New England to his brother, James, Duke of York, afterwards King James II. of England. By deeds of lease and release, dated June 23-4, 1664, James, Duke of York, conveyed the territory now known as New Jersey to John, Lord Berkeley, and Sir George Carteret. Berkeley and Carteret divided New Jersey between them, Berkeley taking the southern or western half, and Carteret the northern or eastern half. In 1673 the Dutch captured New York and New Jersey, which they surrendered in 1674, and as the title to the conquered soil was thereby considered to have reverted to the King, Charles II. gave another grant to the Duke of York for New Jersey and other territory, dated June 20, 1674, and the Duke in turn gave a new grant to Carteret for East New Jersey, by lease and release dated July 28-0, 1674. Carteret dying in 1680, left East Jersey to Trustees, to be sold for the benefit of his creditors, and the territory was put up at auction in London and sold for £3,400, to William Penn and eleven associates, the lease and release being dated February 1-2, 1682. The new purchasers immediately associated with themselves twelve others, and the better to confirm their title James, Duke of York, by patent dated March 14, 1683, gave a new grant to the Twenty-four Proprietors. It is from this Board of East Jersey Proprietors that all titles to the soil

of New Jersey—except for lands under tidewater—are traced.

The first conveyance of land in Passaic County was made in 1678, by Sir George Carteret, to Christopher Hoogland, of Staten Island. It was for two tracts of land, 278 acres in all, in what is now known as the Dundee section of the city of Passaic. Hoogland sold the next year to Hartman Vreeland, and the land remained in an almost unbroken tract in the possession of his descendants until about the year 1830, when the Dundee Manufacturing Company bought most of it, and erected cotton mills on it. In 1872 the name of the Company was changed to "The Dundee Water Power and Land Company," and the corporation began to push the sale of its lands for mill-sites and for residences. Substantially all titles to land in the Dundee section of Passaic are now traced only to this Company, its title having been thoroughly established by frequent searches.

All the rest of the land in Passaic City, in Acquackanonk township and in all of the city of Paterson south of the Passaic river, except a small strip in the extreme western edge of the city, was conveyed in 1685 by the Board of East Jersey Proprietors to fourteen Dutch settlers, mostly from Bergen and New Amsterdam. In Passaic City, most of this land remained in the possession of the descendants of the original patentees until about the year 1862, when much of it was put on the market. Practically all the land in Passaic city has its title so thoroughly and so frequently searched that it is not considered necessary to go back more than twenty years to trace its origin.

In the township of Acquackanonk—the Indian name of the territory patented in 1685—most of the land has remained in the possession of the original patentees and their descendants until within twenty or thirty years, and its title is easily traced.

That part of Paterson south of the Passaic river and east of the ridge broken through by the Passaic Falls, was divided about the year 1711 into twenty-eight farms of 74 morgen (about 150 acres) each, and with few exceptions these farms remained in the possession of the original owners to whom they had been allotted, until 1792. In that year the Society for Establishing Useful Manufactures, incorporated by the New Jersey Legislature in the year 1791, to found a great manufacturing emporium, bought 700 acres of land at and below the Passaic Falls. The Society retained nearly all of this land, until about the year 1835, and still owns extensive tracts in the city of Paterson. Nobody thinks it necessary to go back of the Society's title, and this fact greatly simplifies searching in Paterson.

The tract known as Riverside remained in the possession of the descendants of the original patentee until 1805, when 300 acres passed into the hands of the Riverside Land Improvement Company, which developed the property and put it on the market, with such success that the Company has not owned an acre of land there for years, and the tract has been built up with extensive mills de-

voted to various industries. No search of title for this tract need go back of the Riverside Land Improvement Company.

The greater part of the city of Paterson lying east of East Eighteenth street, and extending to East Forty-second street and the Passaic river, remained in farm lands until about the year 1865, and the title was principally in the descendants of the original patentees, or in their immediate grantees.

The title to nearly all the land in the present Fifth, Sixth, Seventh and Eighth Wards of Paterson is traced to the Society for Establishing Useful Manufactures. In the year 1828 Robert Carrick, a shrewd Scotch cotton manufacturer, bought from one of the original families, a large tract in the present Fifth Ward, and had it mapped out into lots, which were sold according to his map, during the ensuing forty years. His title is considered the foundation for all searches in that section. In the year 1816 the Society U. M. conveyed to the State of New Jersey extensive tracts of land in the Third, Fourth and Fifth Wards, which were sold by the State subsequent to 1835, according to maps prepared for the purpose.

Thus it will be seen that the title to nearly or quite every part of the city of Paterson south of the Passaic river is easily traceable to the Society U. M., or to some of the descendants of the original patentees, or to grantees whose title is so well established as to require no further investigation. Indeed, it is a simple matter to trace the title of this section to the original patentees in 1665.

Totowa, as the Indians called it, being the northern part of Paterson, lying north and west of the Passaic river, and west of Clinton street, was conveyed by the Board of East Jersey Proprietors to George Willocks by patent dated Nov. 3, 1666, and by him to Anthony Brockholls (Lieutenant-Governor of New York), Helmeugh Roelofse and Roelof Helmeughse, who in 1722 divided the 1,500 acres into three lots—Numbers 1, 2 and 3, Brockholls taking 2 and 3, and the other owners—now known as the Van Houtens—taking lot No. 1, lying to the extreme west of the tract, and retaining possession of that section until within a very recent date. The Brockholls heirs sold 100 acres out of Lot No. 3, in 1755, to the Rev. David Marinus, who in 1760 conveyed to Gerrit Van Houte, who dying about 1790-5, left his lands to his children, from whom the title is easily traced. Lot No. 2 also passed into the hands of the Van Houtens and their relatives. The remainder of Lot No. 3, comprising 628 acres, was sold by the executors of Henry Brockholst, son and heir-at-law of Anthony Brockholls, in 1768, to Gerrebrandt Van Houten, Helmeugh Van Houten, Martin Ryerson and Abraham Godwin, who divided the purchase into seven tracts, which they took in severalty, and which remained in their families mostly until about the year 1825, so that the title to this whole neighborhood is easily traced.

That part of the First Ward lying east of Clinton street was included in the Wagaraw patent, given by the Board of East Jersey Proprietors in 1760 to Frans Ryerson, in

whose descendants the land remained until about sixty years ago, when it was mostly sold in large parcels, to investors, who caused it to be mapped out into lots, which were sold by these maps during the ensuing thirty or forty years.

Another fact that simplifies the searching of titles in Paterson is the custom that has been followed during the past twenty-five years of organizing land companies to buy up extensive tracts and improve them. The titles of these companies have been so frequently scrutinized that it is seldom thought worth while to go back of them.

There exist to this day fences marking boundary lines in

the city of Paterson that were established so long ago as 1714. Within ten years an extensive farm, known as the Van Houten tract, lying on Broadway and adjacent streets, has been put on the market and sold off in building lots, on which have been erected dwellings costing in the aggregate between five and ten million dollars, and yet until within ten years no deed has ever been given for this property, it having passed by descent or devise during a period of two centuries.

The facts given above show that it is an easy matter for any intending purchaser to satisfy himself regarding land titles in Paterson, Passaic and Acquackanonk.

Paterson's Water Supply.

BEING A HISTORICAL SKETCH OF THE PASSAIC WATER COMPANY.

By Mr. JOHN J. BROWN, President of the First National Bank.

THE first record in the books of the Passaic Water Company is the following:—

PATERSON, N. J., Feb. 11, 1854.

A meeting of the Commissioners of the Passaic Water Company was held this evening, when it was agreed unanimously that the following notice be given in the Paterson Guardian and Paterson Intelligencer:

NOTICE.

The books for the subscription of the capital stock of the "Passaic Water Company" will be open at the office of C. S. Van Wagoner on Tuesday 7th, Wednesday 8th and Thursday the 9th days of March, 1854, from 10 o'clock A. M. until 5 o'clock P. M., each day.

Signed,

T. D. HOXSEY,
JOHN J. BROWN,
C. S. VAN WAGONER,
JOHN RYLE,
SAMUEL SMITH

PATERSON, Feb. 14, 1854.

At a subsequent meeting of the Commissioners held March 4th, an organization was made by the choice of Mr. Van Wagoner as President of the Commission, Mr. Drew as Secretary and Mr. Brown as Treasurer. It was ordered that when subscriptions were made to the capital stock on the opening of the books, that ten per cent. should be paid; namely one per cent. in cash and nine per cent. in checks, which should be approved by the treasurer. Pursuant to the notice, the books for subscription were

opened on the days named. It is possible that if this occurrence had taken place in this year of grace 1850, there might have been, even in Paterson, a desire to push on an enterprise of so great moment, as the introduction of pure water. But at this early date, only few took interest in it, and the full amount of the subscription to the capital stock was only completed by Mr. John Ryle, who had already subscribed for the largest part, filling up the amount needed, by subscribing for the balance. This was done at the last hour of the last day, before closing the books.

The original subscribers to the stock were as follows:

John Ryle, R. L. Colt, Thomas D. Hoxsey, John J. Brown, Andrew Derron, Thomas Thorp, William Ryle, Jr., C. S. Van Wagoner, Peter Ryle.

The amount of the capital stock thus subscribed for was \$100,000. On the 11th of March notice was given by the commissioners, in the papers before named, that the stockholders would meet for organization. This meeting took place on the 30th of March and resulted in the election of the following, as a Board of Directors:

John Ryle, Roswell L. Colt, Cornelius S. Van Wagoner, Thos. D. Hoxsey, John J. Brown, Peter Ryle, Thomas Thorp.

On the 15th day of April, the first meeting of the Board of Directors was held. At this meeting Thomas D. Hoxsey was elected president, William Ryle, Jr., treasurer, and Thomas Thorp, secretary, all for one year. It may be mentioned here that Mr. William Ryle, Jr., was the late Mr. Ryle, so well known as a large manufacturer and importer of silk, and not the present Superintendent of the Company, who bears the same name. At this meeting also, it was resolved that John Ryle, C. S. Van Wagoner and Thomas D. Hoxsey should visit and inspect the water works at Buffalo, Cincinnati and Philadelphia at the expense of the company.

Thus was started into being a company almost without friends; quite without money, with an utter lack of experience; with a very inadequate conception of what a water supply to a city meant; with everything to learn and at a period when only the larger cities had introduced water. As may be imagined, an enterprise like this, requiring so to speak a giant's strength with only the power of a child could only be attended by a world of care, anxiety and trouble, and could only be accomplished after many mistakes. As has been mentioned, the force of circumstances compelled Mr. Ryle to take a larger part of the capital stock of the company, than even his very liberal ideas and hopeful disposition had prompted him to do. This became a source both of weakness and strength to the company. The position of Mr. Ryle was one of power by reason of his having large rights to the waters of the Passaic river, derived from agreements with the Society U. M. He also had pumping facilities at the "Gun Mill" and had control of the waters of the lower basin below the falls. This gave him the power of being greatly useful to the company which now his large ownership of the capital stock made him, of course, willing to be. On the other hand the large subscription which he made involved large cash payments, too large indeed, to come from one pocket. It may be borne in mind, by the older readers of this sketch, that dollars in those days meant a good deal more than they do now. Paterson had then no reservoirs of capital such as national and saving banks to go to, and neither real estate, nor silk machinery nor even silk itself, such little as was here at that time, could build water works. Hence the early records of the Water Company show a series of trials, delays, makeshifts and disappointments from this lack of cash means. Some of these were foreseen and inevitable, some, as may be supposed, came unbidden, but all alike were unwelcome.

As an illustration of the value of the dollar of that day, and also of what we in this extravagant age might call a grim joke, the following resolution was passed at a meeting which provided for the election of directors for the second year:

Resolved, That Thos. D. Hoxsey be paid the sum of one hundred dollars, for his services as President for the past year, and that the Secretary and the Treasurer be each paid ten dollars for the same term."

From the very first, and it may be added here, to the very last Mr. Ryle took an intense interest in the Water Company. This did not grow alone out of his large holdings of capital stock, nor out of his connection with the interest he had in the valuable water privileges before named. His mind was a broad one, and took in large interest aside from that of gain, so that in the development of this great boon to the city of Paterson, his money interest in the Company compelled him to go on, but it was subordinate to his public spirit and desire for the public good which constantly led the advance. His intimate friends know quite well, that a good deal of his life was spent in what he, in his sometimes use of the Yorkshire dialect called "worretting" over his business troubles. He lived to see the promised land of the great success of his cherished scheme. He scarcely more than entered it, but he doubtless felt that he could leave to his children some of the results of the care, anxiety and trials of a generation of years. He was able in the later years of his life, in referring to the terrible disaster which swept away his fortune by the burning of the "Murray Mill," to say "I was ruined by fire, I was saved by water."

FIRST SUPPLY AND POWER.

To go back in our history: Mr. Ryle had before this time acquired possession of a part of the Falls property now owned by the Water Company. He had constructed the reservoir now known as the "lower reservoir" then, however, quite small in extent; and he had at the "Gun Mill" a surplus of power beyond the needs of the mill. He proposed to the Company, for a certain sum per annum, to supply them with water from his reservoir, the water to be forced into the reservoir by his power from below. This was all in anticipation of the mains to be laid by the Company. This inadequate and costly scheme for lifting water to that altitude, with all the risks of piping so rapid a stream as the Passaic often is, so near the falls, was after considerable negotiations adopted; and this first supply, and for several years after the only supply, was by this crude and make-shift method of sending the very water back, which had just tumbled over the falls, and which again came back through reservoir and mains to the streets below. So great a mistake must be attributed to inexperience, to lack of means for a more perfect way, and perhaps charitably, as one of the same kind of mistakes which nearly always attend new enterprises.

LAYING MAINS.

In the autumn of 1855 various cities and towns were visited to ascertain the relative value of the so called cement pipes. Full reports were made on the subject, especially by General Hoxsey, the President, and in June, 1856, the directors voted to adopt the cement pipes for street mains. The sizes for the various streets were determined upon and a contract was entered into with The Patent Water and Gas Pipe Co., of Jersey City for a quantity of the pipes and the laying of the same. It is worthy of record, that the first contract made with that Company contemplated the

laying of over fifty thousand feet of mains, or over ten miles. The contract for trenching was given to Thos. A. Quin, a contractor then living in this city.

ISSUE OF BONDS.

It need scarcely be said after mentioning the inadequate means with which the Company was launched into being, that money would have to be borrowed sooner or later; and so it was; only it was "sooner" and not "later." At this early time, with large expenditures before them, and the expectation of revenue only in the future, it need not be wondered at that the contract with the Pipe Company contemplated the payment of a part of the work in bonds. These bonds were accepted by the Pipe Company, and thus was issued the first of a class of securities which have become nearly as familiar to the investors of Paterson as the municipal bonds of the city itself. These bonds were not for a large amount and of course have been long since paid. There have been some days since that time, which might well be called dark days for the Company; some days when it was difficult to raise all the money that was needed for their many wants, but never from that early day of small things to the present has there been a day when the bond-holder waited for the payment of his interest coupon.

CONTRACT WITH THE CITY.

As might have been expected, the company made early application to the City Council for a contract for the use of hydrants for fire protection. As is often the case in matters of this kind, the company were met by many delays and questions, though not quite by refusals. Still the questions would arise as to the pressure, the quantity, the capacity of the pipes, the strength of the pipes; and then above all, the compensation. Without settling these questions the company went on steadily with the work. The mains were laid, and from lack of better directions, the hydrants placed where it was thought they would do the most good. Before the final agreement and while still the mains were only partly laid and the city partly supplied, a fire took place at the corner of Main and Van Houten streets, where the Continental Hall building was afterward erected. The prevention of a large conflagration by means of the new hydrants was so clearly demonstrated that most of the questions were answered at once, and they being removed, satisfactory agreement was arrived at. Since that time there have been several contracts made between the two corporations, for the supply of hydrants and other public uses, always it is believed to mutual satisfaction.

QUIET PROGRESS.

In the beginning of 1857 the Company purchased from Mr. Ryle so much of the falls property as was then deemed necessary for their use. This was the first purchase of real estate which in later days has assumed large proportions. About this time the Company engaged an office for themselves. Hitherto they had used the treasurer's office. As a commentary on those early times and limited ideas which were the rule, it may be named that it

was voted "to lease the rooms above Burnett's book store, lately used by the City Council, for five years, at eighty dollars per annum." These rooms he it known had been previously occupied by the city as a Council Chamber at sixty dollars per annum. "Great Scott!" some one exclaims, "the Paterson City Hall at sixty dollars a year." Bear in mind, gentle reader, that this was in the year of grace 1857, when city officials furnished their own offices and their own furniture.

During this and the succeeding year the services of General Hoxsey as President were deemed so efficient and valuable that his salary was fixed at \$200 per annum, and the sum of \$500 was voted to him as extra compensation for services as engineer and counsel for the Company; \$50 per annum was likewise deemed the proper figure for the salary of the secretary. During this and the following year the mains were laid and water was supplied to what was then called the North Ward. This was by means of a pipe laid on the stone piers under the flooring of the county bridge, permission having been previously obtained from the Board of Freeholders.

CHANGE OF POWER.

The years of 1858-59 and '60 were years of gradual increase in the users of water; increase in expenses and a continuous demand for more money. These years also developed the utter inadequacy of the means for supplying the reservoir to meet the increased demand for water. Various changes were suggested from time to time, but not until 1861 was a determination arrived at, to make a radical change in the method of pumping.

The credit of this great change should be awarded to General Hoxsey. It was that the power at the Great Falls should be utilized for pumping, while at the same time the water of the river above the Falls should be used for supplying the reservoir instead of taking it from the basin below. This common sense idea, and one very easy to see the merit of, after it was done, was a longer time in being accomplished than would now be imagined. What any one can now see how to do was then supposed to be too large a work for the then feeble Company. Columbus and the egg over again. Still it was done. A committee consisting of the president, the treasurer and Mr. Andrew Derrom were empowered to examine methods, consult competent engineers and report as to the practicability and cost. The outcome of this was in the autumn of this year, Mr. Emil Geylene, an engineer of Philadelphia, was contracted with to execute the work, he being furnished with a turbine wheel from Dayton, Ohio; rock excavation and mason work by Paterson quarrymen and the promise of means of payment by the treasurer, the whole work being under the superintendence of General Hoxsey. This method of using a part of Passaic Falls still goes on. There has been need of enlargement certainly; the turbine of that day has given place to a larger one, the excavation in the rock has been made deeper so that more power could be obtained, but the plans of General Hoxsey for the method and his promise of the results was a marked suc-

cess, and now remains fastened in the rocks as a monument of his sagacity.

SECOND RESERVOIR.

The latter end of the year brings the first mention of the need of a second reservoir. There was, however, no further action on it until early in the following year, when Messrs. Hoxsey, Brown and Derron were appointed to interview the city authorities with a proposal for the extension of the present contract for the supply of hydrants. This was as a preliminary consideration to aid the Company before undertaking so large an expenditure of money. Notwithstanding the urgent need of meeting the reasonable demands for a better supply of water, various causes prevented action, and like many other corporations before, and as many no doubt, will do hereafter, much talk and little performance was the order of the day; so that three or four years elapsed before the second, now called the middle reservoir, was built.

A DISASTER.

In the winter of 1867 an unexpected and terrific disaster befell the Company. It may be stated that the entire water supply of the city at this time, came through a large main, laid on a bridge built for that purpose crossing the river from the Valley of the Rocks to the "Gun Mill" yard. During a heavy freshet, either by the power of the current, or by the heavy masses of ice which came with the torrent of water, the bridge was carried away and of course the pipes with it. This left the city entirely without water. It needs no words to tell what this meant. Fortunately the Paterson Gas Company had at that time quite a stock of large iron pipe on hand. This gave a chance to repair, with little loss of time, what promised to be one of the great disasters to the city. Again Gen. Hoxsey's energy and prompt action helped to lessen the duration of the calamity. New pipes were connected with the broken pipes leading from the reservoir and were laid with great rapidity on the surface of the ground (no time being taken for excavation) along the Valley of the Rocks to the bridge then standing, called the "Ryle bridge," crossing the bridge and into the Gun Mill yard, where they were attached to the pipes on the south side of the river, thus restoring the connection between the reservoir and the city. Many will remember the odd appearance of this new kind of supply pipes, lying as they did, like an enormous serpent on the highway. They will remember too the feeling of relief when the work was accomplished. The Company provided for a night patrol during the interval between the break and the repair. It may be named here that when the principal repair was made, the pipes were anchored in the bed of the river, among the rocks where it is believed they are secure from both floods and ice. Mr. John Drew, then Superintendent of the Gas Company, rendered very efficient services on this occasion, and the Company tendered him a present of \$250 for this service. Mr. Drew having signified a preference for a

watch as a testimonial, his wish was met by the presentation of a watch and chain costing the same sum.

THE NEW RESERVOIR.

In the spring of 1867 the project for the long talked of new reservoir began to materialize. The land now occupied by the middle reservoir was selected by the directors subject to the approval of Theodore Weston, a capable civil engineer. Mr. A. A. Fondt was engaged as the Company's Engineer, and a committee appointed to purchase the needed land. During the months of May and June surveys were made; the property was purchased; the plans were approved and a contract for building the reservoir was made. This contract was awarded to Mr. Thomas F. Hoxsey. Nearly a generation who have grown up, so to speak, around it, can attest its stability and usefulness. Few only remember the rough gorge which was once the site of this reservoir.

As this is the first mention of Mr. Fondt as being engaged a engineer for the Water Company, it is a good place to state, that as long as he lived, he was the valued and skillful employee of the Company; prompt in doing all that was required of him, and, so far as the writer can say, never made a mistake to the injury of the Company. His death was a serious loss to the Company, as well as to a large circle of friends as well as to the community, for his place was one hard to fill.

At the election this year Mr. Hoxsey retired from the presidency after thirteen years of faithful service. Mr. John Ryle was chosen in his place and was re-elected from time to time until his death in 1887.

CONTROVERSY WITH THE SOCIETY U. M.

In the year 1868, a controversy arose between the Water Company and the Society U. M. as to the use of the water at the falls. As might be supposed, where such valuable rights were involved, the controversy was severe, but the difficulty was kept out of the courts by mutual concessions. The settlement at that time covered several very important points, among which was making the well known openings in the west side of the Society's dam, which were to be for the use of the Water Company, and which are still used. Until quite recently, when a full agreement was made for the use of water, which may be named hereafter, there was a continuous disagreement over the use of water by the Company; the Society claiming that water was used beyond what the agreement warranted. This is now probably settled for all time.

By 1870 it had become very evident that the pumping power was inadequate for the supply of the reservoirs, now two in number, to meet the increasing demand for water.

A NIGHT TO BE REMEMBERED.

The principal design of this sketch is to give a plain but reasonably full history of the rise and progress of the Water Company, and therefore little else than a simple statement of the facts necessary for a proper understanding of it has been deemed necessary. A little departure from

this method, may, however, be permitted, so far as to give an account of an occurrence, which had in it the elements of expectation, fear, joy, relief, etc., combined.

The occasion was the trial point of the success or failure of these new pumps. They were untried; large, they were called then; made by new men so far as such construction went; and the results of the trial were of that painful interest which can only be imagined when one can think of a whole community being deprived of water. Of course every preparation was made to shorten the time which must elapse between the cutting off the old system and the connection with the new.

The pumps and their connections were completed as far as was possible before this severance was made. A Sunday was chosen for the time as the day when the least water was needed. The reservoirs were filled to the brim. Then all means for pumping was cut off, and the city had only the supply already in the reservoirs to rely upon, with the narrow margin of the success of the new pumps, and the time it might take to complete the connection. As may be surmised, no time was lost. As many as could work in the narrow limits of the wheel pit, quite below the surface of the surrounding water, were laboring in the dim light of the oil lamps, but they worked with a will. Instead of the work being completed by the close of the day as was anticipated the hours of the early night came, and then midnight came still finding some of the work incomplete. Never it seemed were bolts so hard to fasten; never screws so difficult to work. Meanwhile the reservoir had gone down at the close of the day, and the interested watchers welcomed the night, if it was only that the water would then cease being used. Still the water went down; and so, to speak, the fear went up as to what would be done in case of fire for that part of the town then without water. Midnight came and it could only be a few minutes before the last bolt would be in place. The anxious faces were pitiful to look at. The builders were there, care worn but reliant. Mr. Ryle had left the ground, sore hearted that there was any failure to keep up the supply; for the full moon looked down that night on a reservoir lined with mud; there seemed not a gallon left. Mr. Fonda the engineer, Mr. Brown the treasurer, Mr. J. C. Ryle the secretary, General Hoxsey, "Andrew" Edwards (still with the company) and "Rome" (Romulus Vreeland) pump tender, were with a few others the anxious but hopeful watchers. The word came that the water could be turned on; the turbine wheel speed on its way, and soon the great arms of the pumps began to move slowly but steadily; but they told that the work was done. The watchers hastened to the reservoir to watch the coming stream. It flashed out in the moonlight, and a large part of Paterson was saved from a water famine by a narrow margin indeed. The relief was intense, and one incident of the "let up" may be named. While waiting for the water to be forced through the inlet pipe, General Hoxsey picked up a bucket which stood at hand, ran to

the mouth of the pipe, caught the first flow of water and scattered it on the bystanders.

A dim, misty tradition belongs to that night and the two following days; but as there is no record of it in the books, it may be deemed as untrue. It is that there was a very open house kept by "mine host" at the falls, and that all were made welcome to eating and drinking as they pleased to come, and it is said too, that a good many came.

LARGE PURCHASES.

In 1871 the purchase of the Oldham's property was made, taking in the mills, machinery and lake connected therewith. This was done mainly for the possibilities for storage of water in the lake and its surroundings.

No efforts for utilizing this property as to a water supply have been made up to this time, and the only benefits to the Company have been from the buildings, the water power and the control of the lake with the ice which is formed thereon.

The following year the Company made the largest of their purchases. This was the whole tract, comprising the Falls property not already acquired, and taking in the property where the "Totowa reservoir" now stands, and all the lands between Totowa avenue and the river. This purchase was \$270,000.

In 1872 and 1873 Totowa was supplied with water. This could only be done by building a reservoir high enough to serve this elevated part of the city. No less than five miles of mains were required for this supply.

COMPLAINTS AND CRITICISMS.

At times during these later years some complaints were heard as to an inadequate supply of water. It was questioned whether there was a proper head, or that the mains were not too small. These comments were developed, or rather intensified by reason of a lack of water for the steamers at two fires, which occurred, perhaps in 1874. Fear was expressed by both people and press that there was a lurking danger to the city by reason of some deficiency growing out of either of the above named causes, or perhaps from both combined. The subject was taken up by the Board of Trade, who through a committee consisting of Messrs. John Cooke, Benjamin Buckley and William G. Scott, made a careful investigation. Their report stated "that there was no foundation for the unfavorable reports which had been circulated," that, "in their judgment there was an abundant supply to keep our steamers in full operation during the existence of any fire." The report goes on to say, "this opinion is based upon the following facts: that the two reservoirs which are in use, excluding the new Totowa reservoir, contain ten million gallons of water, while the pumping facilities are such that the supply in reservoirs can be replenished at the rate of six millions per twenty-four hours;" that "the six steam fire engines, when on fire duty, would be supplied for nearly three days steady pumping without any water being

supplied to the reservoirs, while the pumps are capable of supplying the reservoirs with twice as much water per hour as all the steamers can use in that time." The committee also gave statements as to mains and gates as well as to the method in which it is made possible "to divert the water from the usual courses, and the whole force of the reservoir be given to one or more sections as may be required." It is worthy of record here, that at this time, attention was called by the Board of Trade to a still greater subject, namely the interest which the large cities in northern New Jersey should take in preserving and utilizing the water supply for their own uses. The committee close their report with these words: "The subject of co-operating with Newark and Jersey City, in regard to a future supply of water for said cities" "is of such great importance and involving questions which require such careful investigation," that they ask to be relieved from considering it.

We of this day, know that these questions of "such great importance" were *not* duly investigated by any of the interested parties, and they are now compelled to treat with others for a supply: men of another state, who had the wit to conceive, the boldness to apply and the financial ability to take in hand so great a work are at this time, engaged in an enterprise which once could only be undertaken by a nation.

Notwithstanding the favorable report made by the Board of Trade, the Company proceeded to increase the pumping power, and placed a new pump in the Valley of the Rocks with necessary dam and wheel. This was an attempt to utilize the power which had already been used at the falls. This again going back to the old system of forcing the water from the lower basin to the reservoirs above, was so manifestly a waste of power, that it was soon abandoned for the better plan of using coal for power, rather than using water at so great a disadvantage.

FEARS OF A WATER FAMINE.

The summer of 1875 was an extraordinarily dry one. This was the year when several of the large cities nearly prohibited the use of water, except for the most necessary purposes. The sprinkling of streets, the washing of wagons, the use of fountains and garden hose, with some other uses of water were restricted or prohibited. The Passaic Water Company were not compelled to resort to these measures, but they did doubtless trespass considerably upon the kindly feeling of the S. U. M. and probably overstepped the rights which had been accorded to the Company. At any rate, such a claim was made, and was finally liquidated at a heavy cost. Still the people of the city had the water, and that was satisfactory to them, whoever might suffer in purse for it. The year was a dry one as has been said. Some entertained the fear that the Passaic river was gradually falling away, and that the following year or years would be more trying than the present.

FRANKLIN LAKE.

This apprehension of a water famine, (possibly there were no other reasons) induced the then managing directors of the Company to look to the waters of Franklin Lake as a source of supply. A committee was appointed to investigate the subject. This committee made so favorable a report, that the Company agreed to buy from the "owners of Franklin Lake, and from the Franklin Lake Company" "all their rights and franchises." At the time this purchase was made there were also purchased all the rights of power and privileges of flooding lands on the river immediately below the Great Falls. Whatever may be the ultimate value of these costly grants and purchases, they have thus far been of no benefit to the Company; for in all the varied schemes for securing larger supplies of water, Franklin Lake has borne no part. Indeed so little account was made of these rights, to meet the ever growing demand for more water, that at a meeting of directors held Sept. 28, 1876, the following action was taken:

WHEREAS, in consequence of the unprecedented drouth during the past summer the Water Company has suffered much inconvenience from the short supply of water; and for the better providing of an ample supply in the future, and as a guarantee of a perfect and ample supply, on motion of W. Ryle seconded by Peter Ryle, therefore be it

Resolved, That the Company purchase a steam pump and boilers to be used as an auxiliary to their present pumps and machinery at the Passaic Falls, and that the steam pump shall not be less in capacity than one and a half million gallons in twenty-four hours; and that excavations be made at once for the placing of the steam pump and boilers, and that the same be enclosed in a suitable building; and that the President be authorized and is hereby empowered to make such purchases and improvements.

At this same meeting Mr. Edward Osborn was elected a director in place of General Hoxsey who had retired.

In pursuance of the decision for obtaining additional power at the Falls Mr. James Beggs was called in to propose plans and specifications. This did not occur until late in the autumn of 1877. The plans provided for a steam pump which would deliver 3,000,000 gallons every twenty-four hours. It is sufficient to say here that at a large expense the new power was put in and the building erected over it under the superintendence of Mr. Beggs, and for all the years since has proved an efficient auxiliary whenever it has been needed.

A CHANGE IN MANAGEMENT.

In April 1877 a very radical change was made in the management of the Company. The seats of all the directors except that of Mr. Ryle the president were vacated; their places were taken by men who had either as stockholders or bondholders acquired a large interest in the Company. These new men were the late William Ryle, who had in the early history of the Company been a director and officer; Mr. William A. Hadden, of Hadden & Co., N. Y.; Mr. William H. Fogg, of the China and Japan Trading Co., also of N. Y. Hon. Seth Low was also

elected, but resigned before taking his seat in the Board. His place was filled by the election of the late John Shaw. Mr. Brown also resumed his seat in the Board, which he had some time before vacated. This change in the management was made necessary by reason of the financial embarrassments which the Company had gotten into by a too free use of its money and credit. The new Board proceeded at once to take measures for restoring the credit of the Company, and rescue it from the peril which faulty management had produced. It is not necessary to dwell in detail on this part of the history of the Company. It may almost go without saying that a Board of Directors such as were then in office, would be quite likely to bring order and success to a financial condition, when what was needed was only a right use of the great resources of the Company. This history would be quite imperfect did it fail to record that in this trying time for the Company, the late William Ryle, who as before named, came again into the direction, proved himself a tower of strength. His clear head and persistent efforts were of the most valued kind. He used his position as a director, as a large creditor of the Company, as intimately connected in business relations with other large creditors, and his own means as well in this effort to make the restoration of the credit of the Company a success. He had able helpers certainly in some of the other directors, and the First National Bank gave important aid to the efforts of the management. Still a true statement calls for a record that a large measure of the praise for the rescue of the Company from imminent peril, is due to the late William Ryle. This statement is permitted now that he has (with so many of those who were associated with him in this transaction) passed into the land where praises and blame are alike unheeded.

STILL MORE WATER.

The history of the Water Company, perhaps of all water works, private or public, shows a continuous demand for an additional supply of water. Hence, notwithstanding the additional power named above, only a few years intervened before the necessity for more water seemed as great as before. Indeed so great was the apparent need for a more plentiful supply that the Board of Trade again took the subject up and appointed a committee to make a careful investigation as to the efficiency of the Company in fully supplying the city. This committee consisting of Messrs. William Strange, Watts Cooke, William G. Scott and H. V. Butler, made a very full and elaborate report under date Dec. 28, 1880. This report may be found in the published records of the Board of Trade for 1880-1, and showed fully the condition of the Company, with its facilities for supplying the city. Their recommendations were of an important character, and were accompanied with the statement that some of the former promises made by the Company had not been fully carried out. A supplemental report made at the beginning of the next year, stated that the Water Company were aware of the growing needs of the city, that they had not been unmindful of the requirements, that a good deal had been done, but that

there had been an unlooked for increase in the consumption of water and that it was "admitted that more strenuous measures were now needed to insure the city against the possibility of a scarcity of supply in the future." The result of these inquiries and reports together with the knowledge on the part of the Company that the additions were required prompted immediate action, and the Company at once contracted with W. G. & J. Watson for a duplicate set of horizontal pumps the same as were already used. These were placed without loss of time. About this time the Company purchased and placed at the pumping works the large steam engine which had for a long time been lying unused at the Arkwright Mill, now Doherty & Wadsworth's. At this time was also built the high chimney at the pumping works.

These improvements were made after plans of Mr. James Beggs.

THE STONY ROAD RESERVOIR.

In the early part of 1884, the purchase was made of the property now known as the Stony Road reservoir. The directors of the Company had cast longing looks upon this property for many years. This site and the high lands then belonging to the late Mr. Heins, now part of the Laurel Grove Cemetery, were both selected as admirable sites for what was needed. The last named could have been obtained with little trouble, and was in many respects very suitable, but the other was so far superior in every respect, except that of size, that the Company hesitated to take anything but the best, and determined to bide their time in hopes that it might be purchasable. This occurred as before named, in the spring of 1884. Not for a year after this purchase was any work done in the construction of the reservoir. During the following year however the work of construction was put under way and was completed in the most perfect manner as is so well known to those who are experts in such works. To Mr. William Ryle the superintendent, and Mr. T. F. Hoxsey the contractor, great credit is due for the manner in which this noble work was executed.

A CHANGE OF OWNERSHIP.

In the year 1887 a great change took place in the ownership of the Water Company. Some change was also made, though not quite so radical, in the management of its affairs. The large money interests which had so long been held by Mr. John Ryle and to a lesser extent by the directors, resident in New York, had been parted with, with the consequent result of their places in the Board of Directors being made vacant. Messrs. Garret A. Hobart, Edward T. Bell, T. F. Hoxsey and William Ryle were elected in their places. Mr. John Ryle retained his place as president. These gentlemen still constitute the Board, with the exception that the death of Mr. Ryle, the president, made a vacancy in the Board which had not been filled and compelled the election of a new president.

This change in the ownership of the Company brought into its interest men of large minds and large means.

They had already, as has been before named, grasped the great idea of utilizing the waters of the Passaic river and its tributaries with the almost limitless possibilities for the storage of water for the cities of Northern New Jersey. Later on than the change thus referred to, the general public has through the newspaper press become aware of the purposes of this combination. It is no less, so the statements are, than that through the various corporations which are more or less under their control, to supply not only the cities of Northern New Jersey, "but for furnishing New York City and Brooklyn, when their demands shall exceed the quantity obtainable from their present sources." It is not a part of the history of the Water Company to make further references to this great enterprise; besides it is already published more fully than it can be here. It is sufficient to say, that the Passaic Water Company have made large and valuable contracts with the corporations controlling the waters of the Passaic, which give a guarantee for the future supply for many years to come, not only to this city, but to Passaic and Clifton likewise. These great advantages, were only obtainable at large cost, but all the same the benefit comes to the people, and generations to come will enjoy the great benefits, when the schemers and workers are quite forgotten.

CITY AND COMPANY.

Several times during the history of the Company propositions have been made looking to the acquirement of the works by the city. At times, there seemed to be a near consummation of it; but some opposition was developed that prevented it. Opinions have always varied as to the policy of the city becoming the owner of the works, and when the matter was referred to the people themselves, as was the case on more than one occasion, the decision was against the acquisition. It is probable therefore, that the present condition of things will continue, and that the city of Paterson and the adjacent city of Passaic will be supplied with water by the Passaic Water Company.

It is a matter of congratulation to all concerned, that there has been so good an understanding, so much of mutual forbearance and so little of irritation as there has been, between the two corporations so prominent, and so intimately connected with the welfare of the city, as are the city and the Company. Of course it is understood that their interests are mutual, but still, that does not always insure the absence of unpleasant attrition between large corporations. The relationship between the two are quite well understood, but it may not be out of place to say here, to the general reader, that the city is a large customer to the Company, paying for fire protection and sanitary purposes, while the Company makes large returns in taxes paid, and the willing devotion to the people of the city for their use and pleasure, more than twenty-five acres of park, river and Falls. This superb spot has no parallel in the State and has been made free to all.

CONCLUSION.

Little remains to be said. In this sketch there has been

a studious avoidance where it was possible, of any reference to the labors of those still living, and now connected with the Company. A slight departure may be permitted perhaps, so far as to name at least, Mr. William Ryle, the present superintendent. Much of the present efficiency of the present works, and nearly all of the watchful care during the later years, over the reservoirs, pipes, gates, engines, hydrants and the score of other things pertaining to the water supply of a city, may be credited to him. He has had the care growing out of the daily needs of the Company's work, and at midnight as well as at midday is wont to be summoned to meet the requirements of some unexpected and untoward mishap. This little allusion to him will not perhaps be gratifying to his modest estimate of himself, but he will first see it here, only with the general reader, and will have to endorse it as best he may.

IN MEMORIAM.

The late President of the Company, Mr. John Ryle, was it is well understood intimately connected with it, from the very first, but not for that alone, but because of his equally well known work in this city as a leader of men, a place is given here, to make a more enduring record, of the resolutions placed on the minutes of the Company on the occasion of his death.

EXTRACTS FROM MINUTES, NOV. 14TH, 1887.

"Mr. Hobart then stated that the object of the meeting was, that as the Hon. John Ryle, the President of the Company, had lately died in England, leaving not only a vacancy in the Board of Directors, but in the office of the President of the Company, it was fitting that some proper memorial or resolution be passed by this Board, expressive of their loss. And upon motion of Mr. Hobart, seconded by Mr. Bell, it was unanimously resolved that a committee of two persons consisting of John J. Brown and Edward T. Bell, be appointed to prepare and submit to the next meeting of this Board, suitable resolutions, expressing the sense of the Board of Directors at the loss this Company has sustained."

FROM MINUTES, NOV. 18TH, 1887.

"Mr. John J. Brown then proposed the following resolution: Whereas, the painful intelligence has reached us of the unexpected death of our esteemed Associate Director and President, John Ryle, at, or near his former home in England, it is eminently fitting that a tribute of respect should be paid to his memory by those with whom he has so long associated, and by whom his character and virtues are held in loving regard.

Resolved, That in the death of John Ryle this Company has been called upon to sustain the loss of one who as a director of the Company from its formation, now thirty-three years since, and its President for many years last past, has ever shown an interest and devotion in its success which could only come from the early and constant devotion to its welfare.

Resolved, That the Board of Directors as individuals and as a body, tender their sincere sympathy to his family, confident that they will find the consolation which may well be obtained, in looking back over a life so worthily lived.

Resolved, That the foregoing preamble and resolutions be recorded in the minutes of the Board of Directors; a copy of the same be transmitted to his family, and that they be published in the journals of the city.

Upon the unanimous adoption of the above, Mr. Bell then moved that the Directors of this Company attend the funeral of their late President as a body, which was also adopted."

THE END.

Except for a few statistical statements this history ends here. Not so, however, the work of the Company. This must go on; for every extension of the city brings other requirements. These have hitherto been fairly, perhaps not always quite in time, but still fairly met. The present managers desire to keep abreast with all demands made upon them as far as possible. As an illustration, it may be stated that the costs of last year's extensions alone amounted to \$39,106.00.

As may be supposed, the interests of the Company now require much supervision. The demands upon it are ever increasing. Its revenues and disbursements are second only to that of the city itself. It is quite well understood that the interests of the Company, unlike that of many corporations, are two-sided, for the large obligation of supplying a people with water, both plenty and pure, is an ever present responsibility.

The following are some of the statistics of the Company:

Year.	Miles of Mains.	Hydrants.	Water Takers.	Revenue.
1860	11	100	400	\$9,100.00
1865	25	100	600	13,270.00
1870	30	320	1,470	15,319.00
1875	35	400	2,160	83,390.00
1880	40	475	2,630	97,600.00
1885	45	590	4,280	140,000.00
1889	55	790	6,275	197,000.00

CAPACITY OF RESERVOIRS.		PUMPING POWER.	
No. 1, Lower.	8 million galls.	Steam Pump.	4 mill. galls.
" 2, Middle.	12 "	Horizontal, Stm Eng.	8 "
" 3, Totowa.	2 "	" Water Wht.	6 "
" 4, Stony Rd.	25 "		

OFFICERS AND DIRECTORS, 1890.

GABRIEL A. HOBART, President.	JOHN J. BROWN, Treasurer.
JOHN C. RYLE, Secretary.	WILLIAM RYLE, Superintendent.
EDWARD T. BELL.	T. F. HOSSEA.
	ONE VACANCY.

Horse Railroad Facilities.

It is extremely doubtful whether there is a city in the country in which more money has been spent on horse railroads than in Paterson. Horse railroads were built long before the erection of houses in various parts of the city justified any such expenditure of money. The principal object was in no case the accommodation of the people who had settled in Paterson but the development of various portions of the city and the accommodation of the people who would in the future settle there. There was no doubt as to the future of the city; there was no doubt as to the continued increase of population; there was no doubt that sometime in the future horse railroads would be a paying investment, but it took years to bring about the desired result. The histories of the horse railroad companies in Paterson are alike; heavy investments with limited capital, the issue of bonds, running the road for years at a loss and final failure tell the story of all. Some years ago Paterson had a number of horse railroads; now they have all been consolidated and are being run by one company; the population to make horse railroads pay has come and to-day horse railroad stock is considered a safe and desirable investment.

In 1868 the Paterson & Passaic Horse Railroad Company was chartered and tracks were laid from the Erie depot to Cedar Lawn cemetery, the capitalists interested in the new project being also interested in the development of Cedar Lawn and vicinity.

The late Franklin C. Beckwith built the road for the company of which he was also the president. The first spike was driven by Mr. John J. Brown, then mayor of the city; the second by Mr. Beckwith and the third by Mr. James Crooks, who had been instrumental in securing the charter and organizing the company. Owing to an inadequate capital the company issued bonds; the road was run at a loss for many years; no dividends were ever paid and the company succumbed in the panic of 1873. All who had invested lost their stock and even the second mortgage bonds were wiped out. Before this took place, however, the company had built a line through Willis street and Freeland avenue to the cemetery; subsequently the Market street line was abandoned, and the tracks taken up, leaving Market street one of the finest drives in or about the city. In 1875 a line was built to Lake View through Market street and Trenton avenue but this was shortly

terwards abandoned and the tracks taken up. Subsequently the company built a line on Main street, from Broadway to Barclay street. In 1870 the company was reorganized under the name of the Paterson & Passaic Railroad Company.

The Paterson & Little Falls Horse Railroad Company constructed a line about 1870 from Main street and Broadway, along Broadway to the depot of the Midland railroad company; the gauge was different from the gauge of the other roads, despite the earnest endeavors of Mr. John J. Brown to have a uniform gauge throughout the city. In 1875 the company built a line to Riverside and subsequently one to Fotowa. The history of the company is the same as that of the Paterson & Passaic company; it went down in the crash of 1873 and was subsequently reorganized under the name of the Paterson City Railway Company.

The charter of the Paterson & Haledon Horse Railroad Company was obtained in 1878 and some time afterwards tracks were laid from Main street and Broadway to Haledon. The stock of the company was owned principally by the Passaic Water Company; subsequently it passed into the possession of General T. D. Hoxsey and a few friends and some years later was the individual property of Mr. Garret A. Hobart, who disposed of it to the Paterson City Railroad Company which operated the Haledon line for some years.

The consolidation of all the horse railroad companies was effected on May 1, 1888, the new company taking the

title of the Paterson Railway Company and consisting principally of the stockholders in the old companies. The gauge of the Main and Willis street lines was changed to that of the Broadway and Riverside lines and a large number of improvements were made. The rule which had hitherto obtained in the management of the horse railroad companies was reversed and the company waited until the population demanded horse railroad facilities. The company built the line running through Beech and Clay streets, connecting People's Park with the centre of the city; it extended the Main street line a considerable distance further south; it extended the Broadway line to the Eastside Park and laid a large number of new steel rails and switches. It purchased a large piece of property in Broadway where commodious stables were erected and spent a large amount of money in new rolling stock and equipment. The increased facilities resulted in better patronage on the part of the public and at the present day a large number of extensive improvements are contemplated.


The company has in active operation nearly fifteen miles of road, not including switches and double tracks. On the Main street line cars are run every six minutes, on the Haledon, Fotowa and Beech and Clay street lines every half hour and on the rest of the lines every fifteen minutes.

The officers of the company are:—G. A. Hobart, president; Helmas Romaine, vice president; A. A. Wilcox, secretary; John J. Brown, treasurer; Helmas Romaine, manager; Matthias Pettigrew, superintendent.



The Public Schools of Paterson.

By ORESTES M. BRANDS, Superintendent of Public Instruction of Paterson.

ALTHOUGH it is not the purpose of this sketch of the free public schools of Paterson to present their history in detail, it will not be inappropriate to preface a description of their present by brief allusion to their past—their establishment and development.

“Until 1827, there was no free public school in Paterson or in the present limits of Passaic county. The Legislature had enacted a law in 1820 looking toward the establishment of free popular education, but few communities availed themselves of its provisions for many years. In some cases township trustees selected teachers for what were called the public schools, and a small tax was raised to help defray the expenses, but the parents paid the teacher a certain sum for each child’s tuition; the children of indigent families were of course taught free, if they were willing to be distinctively known as ‘poor children,’ as few of them were.

“A number of the public-spirited citizens of Paterson, being of the opinion that the town ought to support a free school, held a meeting on Saturday, April 7, 1827, and appointed Marks W. Collett, Dr. James Warren, and Abraham Godwin, Jr., a committee to draw up a memorial to be presented at the town meeting the next Monday, recommending the raising by tax of \$100 for school purposes in Aspinokanok township, to be expended by the Town Committee, agreeable to the act of 1820, in the education of poor children of the township. . . . In June the Town Committee met and allotted \$275 to Paterson and \$125 to the rest of the township, a committee of prominent citizens being appointed to take charge and select such children whose parents were not able to pay for their education. . . . Rev. Mr. Gibson, a graduate of Washington College, Penn., was engaged as a teacher at \$75 per quarter, he to find his own fuel. During the year, 134 scholars were enrolled, 70 or 80 of whom began with the alphabet. The school was visited at least once a week by some member of the committee.

Such, then, was the first free public school of Paterson, its object being mainly charitable in that it was established for the special benefit of those who were unable to pay for the education of their children. To-day what a chorus of resentment would arise from the hundreds of class-rooms of the schools of our large city, and from the homes of the thousands of children who are being educated in these schools, if some one were so rash or ill-informed as to intimate that public education is a form of public charity!

From one little school established through charitable motives and consisting of a few score children, the major-

ity of whom were learning the alphabet, has sprung the well-organized and efficient public school system of which the people of Paterson have good reason to feel proud. Fifteen large, well-equipped, brick buildings, a corps of two hundred and twenty trained teachers, and an enrollment of fifteen thousand pupils during a year have succeeded the little rented room, its single teacher, and its handful of pupils distinctively known as “poor children.” To-day these are the schools of the people, and in them the children of the rich and of the poor meet as equals and receive instruction which, though absolutely free, has long since ceased to be regarded as charitable.

Not only are the schools free as regards tuition, but also in all school-supplies needed by the pupils. The best school text-books in all the various subjects covered by the courses of instruction, from the lowest to the highest department, and even the pencils, pens, paper, and writing-books, are freely and abundantly supplied by means of funds annually appropriated for the purpose by the Board of Education. Besides the outfit required by the individual pupils, the schools are well supplied with maps, globes, charts, and other apparatus essential to instruction. The advantages of a uniformity of text-books and of their being supplied at public expense are so evident as to need no exploiting here, and in this particular the school system of Paterson stands in the front rank, — free text-books not being supplied in all cities, by any means.

ORGANIZATION.

The public school system of the City of Paterson, under the jurisdiction of the Board of Education comprises Primary, Grammar, High, and Normal schools. Kindergarten classes are attached to the Primary Department of the schools, and a Manual Training Shop provides accommodation for the instruction in wood-working, etc., of the boys of the High school and of the higher grades of the Grammar schools. The manual training feature finds further embodiment in the study of form and drawing in all the grades of the schools, and in instruction in plain sewing, &c.,

* *Historical Sketch of Schools in Paterson*, by William Nelson, (1877).

for the girls, besides such methods of instruction as in any particular train the senses or the hand to execute the behests of the mind in expression or delineation.

COURSES OF STUDY.

The course of study in the Primary schools covers a period of five years, that of the Grammar schools four years, of the High school three years, and of the Normal school one year.

In the Primary and Grammar schools the course of instruction embraces reading, writing, spelling, arithmetic, grammar, geography, U. S. history, and civil government, physiology and hygiene, and the study of form and drawing. Promotions from grade to grade in the Primary schools are made either whenever the progress of pupils warrants, or at the end of the school year as a result of annual examination, the latter being the method which determines promotions in the Grammar schools, graduation from them and promotion to the High school, promotion in the latter and graduation therefrom.

HIGH SCHOOL.

The High school embraces two courses, a general course of three years covering subjects in language, literature, science, mathematics, and industrial drawing, and a commercial course of two years covering business law, commercial arithmetic and bookkeeping.

Any pupil holding a certificate of graduation from a Grammar school, or any person who shall pass an examination equivalent to that to which graduates of the Grammar schools are subjected is entitled to enter the High school and may pursue either of its courses. It is intended that the near future shall witness a special effort to make the commercial course of the High school so thorough and desirable as to induce many of both sexes to continue in attendance and reap its advantages instead of terminating their school career on graduation from the Grammar schools.

Instruction in the High school is imparted by the Principal and a corps of eight assistants, to each of whom are assigned at least two subjects or studies, the pupils changing from one teacher and room to others to receive instruction. By this method instructors become experts in presenting their special subjects, and the students receive the benefits of the increased skill and knowledge of teachers who teach subjects and not grades.

PRIMARY AND GRAMMAR SCHOOLS.

As the great majority of the pupils leave school at the conclusion of the Primary course, or at the latest during the Grammar course, special endeavor is made to give the instruction in these schools the most practical direction possible, and hence the course embraces only those studies which are most essential, and thorough work is required.

NORMAL SCHOOL.

A Normal school for the education and training of teachers is maintained by the Board of Education and covers one year's course of study and practice. Pupils in this

school which is at present located in the High school building, receive instruction in the history, principles and methods of education, mental and moral philosophy and school government. The students have practice under competent supervision. This school is under the immediate direction of the Principal of the High school, and his efforts are seconded by an able training teacher.

Any graduate of the High school may be admitted to the Normal school; other applicants are admitted upon passing an examination equivalent to that taken by graduates of the High school. At the end of the school year the students are subjected to a thorough examination by the Board of Examiners, on successfully passing which they are awarded diplomas of graduation and are granted "primary certificates" as teachers.

It will be seen from the foregoing that wise provision is made for the pedagogic instruction and training yearly of a corps of well educated young women for the purpose of taking the places made vacant by the resignation of others or to meet the requirements of the constant growth of the school system. These young teachers are first appointed temporarily, on probation; if successful, they receive the recommendation of the Principals of the schools to which they have been temporarily assigned, and upon approval by the Superintendent, they are regularly appointed as teachers. Although one year's professional training is scarcely sufficient to fit all students theoretically for the responsible and arduous duty of teaching, yet our people are to be congratulated upon having even one year's study and practice of the art of teaching interposed as a condition to the appointment of any person as a teacher of their children. In this respect Paterson stands in the front rank of the city school systems of our country. It is true that not every young person who aspires to become a teacher, and takes a course of instruction with that end in view, is endowed by nature with qualities which best adapt her to fill acceptably the teacher's office; but it is equally true that the supply of so-called teachers would be much greater, and vastly inferior in quality, in the absence of Normal Training schools.

Other things being equal the skill and general efficiency of the young teacher trained in the philosophy of education and methods of instruction and the whole supplemented by frequent advice, suggestion and discussion relative to school management, exceeds immeasurably that of one who has not been thus trained. A city which makes provision for recruiting the ranks of its teaching force through the instrumentality of Normal instruction of those to be enrolled in that corps, offers inducements which are always properly considered and fully appreciated by parents who would have the education of their children intelligently conducted.

MANUAL TRAINING.

Besides the occupations and methods of the regular classrooms of the schools, our training shop is the scene of busy, daily work and instruction. Here on any school day may be seen classes of boys from the High school and Gram-

mar schools distributed at the work-benches preparing "working drawings" from which to construct the joints, mortices, tenons, etc., pertaining to the special exercise in hand, and then proceeding to the use of the various tools required in its performance. The instruction and practice proceeds from lessons in the use of the tools and the simplest lessons in sawing and planing of material to the construction and fitting of joints, etc., common in carpentry and joinery, and from lesson to lesson the pupils advance to more complex work and to new fields for the exercise of thought and acquired skill. Exactness of drawing and measurement, and care in the performance of the work, are seen to be so necessary to the prevention of error and consequent botchery, that pupils become impressed with the importance of close, careful calculation and concentrated attention, and thus the faculties are cultivated. All lack of care, of reflection, bears its legitimate fruit, and the incautious pupil has in the spoiled, misshapen material before him an evidence that success and perfection are to be found only in, and as a result of care and thought, and that lacking these his attempts have naturally ended in failure. He has received, and, in all probability, been benefited by a lesson in caution and painstaking, and reflection supplements the whole in future endeavors. It is not difficult to illustrate how, by context, such a pupil becomes a more thoughtful, painstaking student of arithmetic, of geometry, of language, of geography, etc., and that not only his hand, but his judgment as well, is being trained, educated. Again, while the learning of a trade is not the objective point in this feature of manual training, opportunity is given students and their parents to discover the genius, or lack of it, exhibited by contact with mechanical employment. If it be discovered that students have taste for handicraft, and native facility in the manipulation of tools and materials, these may serve as a guide to the choice of occupation to be adopted on leaving schools. If indeed the youth possesses mechanical genius, it will be far better that he become an expert mechanic or artisan—that he follow the occupation for which he has natural aptitude and which through training will achieve success in life—than that he become what the ordinary tendency of the education of the schools has heretofore induced, *i. e.*, a fourth-rate physician, clergyman, lawyer, or teacher.


KINDERGARTEN.

The Kindergarten is one of the most striking illustrations of the effect produced by the process of adapting the instruction, in its manner and matter, to the young child's nature and capacity. Although it has not been found entirely practicable to adopt fully and exclusively the Kindergarten methods in the lowest grades of our schools, yet such a modification of these methods have been so introduced as to greatly ameliorate the condition of the youngest pupils while in the class rooms. The little ones are provided with very frequent changes of employment for head and hand, and thus even among the youngest pupils we have a genuine incorporation of manual training adapted to their mental and physical wants—an alteration of apparent play and more abstruse occupation, all having an objective point and being under the enlightened control of the teacher, who merely causes that control to be so far felt as to prevent undue freedom of action. The ordinary lowest grade primary class is decidedly objectionable, because it assumes that very young children are capable of remaining employed upon "studies" exclusively, and compels them to remain confined to these twice as long as they should be, if wise regard for their mental and physical well-being were the standard of estimate. Happily for the little ones, the adoption of Kindergarten methods in the schools of Paterson has done much to rationalize objectionable conditions, and in this we claim favorable consideration in estimating the value of our local school system.

Steadily, from year to year, our system of schools has improved. Modern and philosophic methods in management, in teaching, in disciplining and controlling pupils, are continuing to replace those of a period during which all these were entrusted to those whose chief qualification was availability. But we recognize that this manifest improvement, this almost revolution, has not been the work of an individual in any of its phases of progress. Many earnest and intelligent workers have, from time to time, placed their shoulders to the wheel, and the result of their efforts, each supplementing that of the others, has been to give to our large and rapidly growing city a school system of which no Patersonian need feel ashamed, though still seeking for its further improvement.



Paterson Business College.

 ONE of the most important establishments in the city, and one contributing materially to the success of merchants, manufacturers and others, is the educational institution in charge of Mr. Geo. W. Latimer. The education of business men is especially demanded in this country. All the powers and attainments and manhood of the American business man are laid under contribution in every direction. The supervision of his business requires him to employ bookkeepers and clerks, to whom are relegated the minor details; but these very details are of supreme importance to the merchant or manufacturer and unless he has a thorough business education himself he is frequently to a greater or less degree dependent on his clerks. The benefits of a good business training are consequently apparent to all. The work of a business college is supplementary to all other schools, of whatever kind. It is broadly and emphatically a professional school and although the technically educated business man is not recognized as belonging to the learned professions, it is not necessarily because he is not learned. The time to acquire a knowledge of business forms and customs is before entering the counting room, as the attention of those in charge is taken up by more important matters which cannot be laid aside till the rudiments of an entry or the forms of a bill or receipt are explained. Business has been brought down to an actual science and must be treated according to scientific principles which can hardly be learned during the hurry and bustle of mercantile life.

Induced with the idea that Paterson needed such a school Mr. Latimer in 1875 established the Business College. Mr. Latimer had been engaged in teaching for many years and his services as an expert accountant had been in great demand. He was certainly well qualified for the undertaking and that he has succeeded is amply evidenced by the progress made since the establishment of the college; that his methods were appreciated is shown by the fact that students from considerable distances are attending his institution; the superior excellence of his training is testified to by the fact that he has met with no rivals in the field which he has so ably and successfully occupied.

The aim of his school is to qualify those who come from private and public schools with no idea of business to do business intelligently either for themselves or for others. And even those who have had some experience in business may with advantage take a commercial course specially adapted to their circumstances. Besides this the needs of another class are supplied; young men who through neglect or want of early opportunities require instruction in special studies. Particular attention is given to training students in the use of the vernacular. If there is any one thing more than another that the average school boy is woefully deficient in it is language—grammar, spelling, &c. The careful individual supervision of the students' work and the nature of this work make it possible to correct this fault to a greater extent than can be done in any other class of schools. It is not alone the fact that the branches taught are practical which commends this school to the public, but more especially the watchful and individual training that each student receives. This is the only way in which a business course of study can be taught successfully. When conducted by means of class instruction at the best it can be only superficial work, likely to give incorrect ideas, which will be made apparent afterwards in that costliest of schools, experience. A business education is too serious a matter to be trifled with; there are always likely to be base imitations of a good thing, and the counterfeits are in themselves evidences in proof of the worth of the genuine article. It therefore behooves a young person who is ready to pursue a business course and be fitted for active life to go to headquarters, to an institution with the prestige that comes from work well and honestly done during many years. Such an institution is Mr. Latimer's Paterson Business College which has long been and will ever continue to be the centre for the preparation of our youth for business life.

The Paterson Business College offers superior advantages in the following respects:—

1. In every department of mathematics, more particularly in rapid calculation, and the method of teaching it to others.
2. Rapid business writing and the manner and method of presenting it to the student so that good writing is the

rule in books and papers of every student. One of the first qualifications that recommend a young person who is seeking an opening in business is a good business hand-writing, not a school-boy hand, but an easy off-hand style combined with rapidity. Mr. Latimer has been eminently successful in developing such a style.

3. Book-keeping by single and double entry, simplified and elucidated in such a manner that the student is interested at once, the science made clear, and all the modern labor-saving methods introduced and fully comprehended.

4. The college hall is pleasant, healthy and commodious, and the furniture and fixtures substantial, comfortable and convenient.

5. The institution has a reputation for sending out young men thoroughly prepared for business and therefore has the confidence and respect of the community.

One of the great advantages of the college is that a thorough business education is acquired by actual business transactions by means of the college bank, the insurance department, the jobbing, wholesale exporting and importing, each of which does actual business and has correspondents in a number of cities in the country. Each student is obliged to keep his accounts correct in whatever department he may be operating, for the reason that a friendly business competition here exists among the students, just the same as in actual business affairs between merchants. Each student is supposed to be in earnest. They are treated like men and are supposed to act like men engaged in the serious affairs of life. In this way the business ability of the student is raised to the highest standard. The course of study embraces book-keeping, penmanship, business arithmetic, correspondence, commercial law, language, practical grammar, spelling and definition, parliamentary practice, lectures on current topics and in fact all branches pertaining to business affairs. The practical department consists of the first national bank, commission house, insurance, jobbing, manufacturing and transportation. Lectures on business affairs and current topics are frequently delivered.

A notable feature of this college is the increasing num-

ber of young ladies in attendance. In these practical times a business education is of great value to young ladies as well as to young men. This fact is beginning to be appreciated. If ladies desire good situations as book-keepers, cashiers, &c., they must thoroughly prepare themselves for these positions and the college affords first-class opportunities for doing so. And even if they do not intend to put the knowledge to immediate use it is desirable that they have a thorough business education, so that whatever happens they may have the ability to support themselves. It does not necessarily follow because a young lady takes a business course of study that she intends to be a book-keeper. It is the best kind of education she can have, far better than one that is mere embellishment; for it is of a practical nature and qualifies her to take care of herself in case it becomes necessary. Besides this, thorough instruction is given in the essential English branches.

The business course can be completed by attending evening sessions and the college diploma secured upon passing the final examination. The evening sessions, which are entirely distinct from the day sessions, are designed for the instruction of men, women and youth, without regard to age, who are engaged during the day in offices and in various kinds of business, but wish to secure a practical education that will enable them to obtain better positions and higher pay. The exercises are conducted in such a manner that no embarrassment is experienced by any student who is earnestly endeavoring to improve opportunities. The sessions are held five evenings of each week and the hours of instruction are from seven to nine.

Mr. Latimer has received numerous complimentary letters from persons now engaged in the active pursuits of life who in their earlier years attended the Business College. A few of these are compiled in the College Circular, a beautifully illustrated pamphlet, which is issued annually.



Paterson's Military.

By JOHN T. HILTON, Adjutant First Battalion, N. G. S. N. J.

"Why cannot we have a good military company in Paterson?" remarked Samuel V. S. Muzzy to Joseph W. Congdon in the fall of 1870. "We could if we only had a financial backing, for it will take quite a sum to start it," answered Mr. Congdon. Several conversations took place between them and other citizens of Paterson, and when Mr. Wm. Strange told Mr. Congdon that if he would get the men and take hold of the movement, he, Mr. Strange, would see that the money was raised, the movement at once assumed form.

Mr. Congdon was a man of good executive ability, and an ex-member of the 22d Regiment, N. G. S. N. J., and he went into the movement with his characteristic energy. From the number of young men who were anxious to go in a military company, he soon saw that at least two good companies could be formed, and when the first formal meeting was called in Pope's Hall in Market street, on December 16th, 1870, it was found that about 100 had signed the roll. After transacting considerable business the meeting was adjourned until January 23d, 1880, at the Sunday school rooms of St. Paul's Episcopal Church, corner of Ellison and Church streets. At this meeting it was decided to form a battalion of two companies, and the name of the organization to be the Paterson Light Guard. This was the parent organization of the First Battalion N. G. S. N. J. The Paterson Light Guard was to be an independent military and social organization, owning their own uniform, arms and equipments. Some \$1,500 was subscribed for the purchase of the latter, the admission fee of \$25 for each member purchasing the former, and the uniform to be the personal property of each member. The uniform consisted of grey coat, suitably trimmed, dark blue cloth trousers, a seal skin shako with pompon, and a regulation fatigue cap for drills. Seal skin knapsacks, and Springfield rifles, .51 calibre, with nickel plated barrels were purchased, and with the belts and plates with the monogram P. L. G., was rather a showy and striking uniform, and equipments to match.

At the January meeting an election was held for a com-

mandant and line officers, Mr. Congdon being elected Major.

Washington Hall was engaged for a drill room, and three rooms in the same building were rented as an armory, officers and company rooms, and were fitted up for those purposes in a suitable and substantial manner.

On January 31, 1880, Major Congdon issued his first orders and as they clearly state the object of the organization, the line, staff and part of the non-commissioned staff officers, I give them in full.

HEADQUARTERS, "PATERSON LIGHT GUARD,"
PATERSON, N. J., JAN. 31st, 1880.

General Orders, No. 1, 88, 1880.

I. In pursuance of an election held on the 23d inst., the undersigned hereby assumes command of this Battalion.

II. It is believed that, in the organization of the Paterson Light Guard, the gentlemen who have enrolled themselves have thus entered upon what they consider to be the discharge of an important public duty, that of affording additional protection to the lives and property of the people of Paterson, and are furthermore actuated by the worthy desire of promoting a spirit of public pride in a military organization of commendable discipline and drill. While this association has not been effected by the process of enlistment in the National Guard of New Jersey, it has been entered into with no feeling of disrespect or disaffection toward the citizen soldiery of this State, or the able officers who command it; but, on the contrary, with a desire to receive from the State authorities such acceptance as shall invest the Paterson Light Guard with the dignity and responsibility that will constitute it the military protection of this important municipality. It is intended to represent no especial class of society, sect, or nationality; nor does it acknowledge identification with the interests of any particular portion of this community as against another. It is urged, therefore, that every man enrolled should regard himself as bound, by every consideration of duty and honor, to conform to the true character of a soldier while in uniform, supporting on all occasions his dignity as a citizen and his reputation as a gentleman. For only as such can he expect to merit the approval of the military authorities of the State, or win the respect and confidence of the citizens of Paterson.

III. The following elections and appointments, to fill original vacancies, are hereby announced:

Co. A. Captain, James Beggs.
1st Lieut. John H. Berdan.
2d Lieut. W. H. H. Stryker.

Co. B.—Captain, Chas. Curie,
1st Lieut.—Alex. T. Groser,
2d Lieut.—John T. Hilton.

Staff.—Adjutant, Jas. Inglis, Jr.
Quartermaster, Jno. H. Hindle.

Commissary, Albert Tilt.
Paymaster, A. S. Allen.
Judge Advocate, Geo. S. Chiswell.
Chaplain, Rev. Chas. D. Shaw.
Surgeon, Geo. W. Terriberry, M. D.
Asst. Surgeon, Theo. V. Kinne, M. D.
Sergeant Major, Jos. Mosley.
Quartermaster Sergeant, A. D. Winfield.
Commissary Sergeant, Wm. W. Evans.

IV. Company drills during February will be held at 8 o'clock P. M., on Tuesday, 3d, Wednesday, 11th, Tuesday, 17th, and Friday, 27th. The officers (including staff) will meet for theoretical drill and instruction on Friday evening, February 6th. For the present no visitors will be held in the Armory during drills.

V. From this date members will be required to answer to the Court Martial for all delinquencies and absences from drills.

VI. Until further orders Commandants of Companies will drill their men in the "School of the Soldier" as far as the Manual of Arms (Upton, page 30.) They will detail men to serve temporarily as Sergeants.

VII. All who have not yet procured their uniforms and equipments will apply for them at once to the Quartermaster. Until the Armory lockers are in readiness, men will keep their uniforms, &c., at their homes. They are to be worn only on drill or parade, except by permission of the Commandant.

VIII. Men desiring transfers from either company to the other will make application at once in writing to their respective Captains.

By order of

Jos. W. Congdon,

Major Commanding.

Jas. Inglis, Jr., *Adjutant.*

Captains Curie and Beggs; Lieutenants Groser, Stryker and Hilton; Adjutant Inglis, Surgeon Terriberry, and Assistant Surgeon Kinne; Sergeant Major Mosley, and Commissary Sergeant Evans, were veterans of the war of the rebellion, and a number of veterans were non-commissioned officers and privates in the two companies.

The organization at this time numbered about 120, at least fifty per cent. of whom were merchants, manufacturers, clerks, salesmen and professional men, the balance representing the various industries of the city.

As the months rolled around it became the settled conviction of the officers and a large number of the men, that the organization would be of more service to the community, and the State, if engrafted as National Guardsmen in the State service. Negotiations were pending with that end in view, when on the first Sunday in May, 1880, a homicide on Garret Mountain led to a riot in that vicinity. Great excitement prevailed. Nearly all the officers and members flocked to the armory and asked to be led out to help suppress the riot and restore peace, but Major Congdon knowing the law in such cases, informed the members that he was powerless to lead them out as a military company; as being an independent organization they were not recognized by the State authorities, and could only go as individuals as part of a Sheriff's posse. Order was restored in a few hours by conveying the originator of the

trouble to Newark, and then came a fusillade against the organization from the daily newspapers. Unjust and uncalled for criticisms were made, and in one case were replied to by Major Congdon, which put the matter properly before the public as follows:

To the Editor of The Sun:

SIR: In justice to the members of the Paterson Light Guard, permit me to correct what appears to be a misapprehension on the part of the reporters who furnished the account of the riot in this city on Sunday last, as to the military character and efficiency of that organization.

The battalion was very recently formed. It has been in existence just three months. It has had but twelve drills; only six of them with rifles. The men have not been instructed in the tactics as far as "loading and firing." It is no part of the State militia. Its enlistment papers are not yet in readiness for the mustering officer. Although cartridges were some time since purchased, they were held on order in New York, because on the admission of the battalion in the National Guard, a different cartridge would be supplied by the State.

Its services were offered without cartridges to Gen. Plume, and he replied that the battalion could serve only as a Sheriff's posse. The Sheriff declined the proffered services because the men were unarmed. The Sheriff, the Chief of Police, the Mayor, and the City Counsel all approved the course of not bringing out the battalion unarmed. Under these conditions was not discretion the better part of valor?

Jos. W. Congdon, *Commandant.*

PATERSON, May 3, 1880.

Major Congdon's course was endorsed by high military authority, and Governor George B. McClellan, ex-Commander of the Army of the Potomac, considered the subject of so much importance that he had the following order issued:

STATE OF NEW JERSEY,)
OFFICE OF ADJUTANT GENERAL,)
TRENTON, MAY 11TH, 1880.)

General Order No. 6:

The following paragraph from the statute laws of this State is published for the information and guidance of all concerned.

"In case of any breach of the peace, tumult, riot or resistance to process of this State, or apprehension of immediate danger of the same, in any county or city of the State, it shall be lawful for the mayor, or city, or sheriff of such county, to make application to the Commander-in-Chief for military aid of the National Guard."

It will be noticed that in case of any apprehension of danger from riot, certain civil officers may legally apply to the Governor of the State by telegraph at the executive chambers at Trenton, for the military aid of the National Guard. There is no authority for them to call upon any other official of the State for that purpose, there is no authority for them to use any military organization not in the National Guard, to furnish them aid, there is no authority for any such organization to attempt, by force of arms, to suppress a mob. In the meantime it is the duty of the civil officers of the city and county, while they may call for aid as herein stated, to fully exhaust the powers conferred upon said officials in the "Act to prevent riots, riots and tumultuous assemblies," before the final appeal is made to the stern interference of the military arm of the State.

By order of Commander-in-Chief,

WILLIAM S. STRYKER, *Adjutant General.*

Official:

S. M. DICKINSON, *Assistant Adjutant General.*

As one of the leading papers stated, the above order had obvious reference to the recent disturbance in Paterson, and the action of the "Light Guard" on that occasion, which is now clear was not only judicious, but the only action they could have taken; to have gone out as a mil-

any organization on that occasion being, as stated in this order, contrary to law."

This riot hastened the mustering in of the Battalion in the State service, and on May 25th, 1880, the formal muster took place in the Washington Hall drill room. The Paterson Light Guard as an independent military organization ceased to exist, and then began the real

HISTORY OF THE FIRST BATTALION, N. G. N. J.

The Battalion was mustered into the State service on May 25, 1880, by Lieut. Col. G. E. P. Howard, Inspector of the 1st Brigade, as Mustering Officer, 121 men being mustered. The line officers were commissioned June 15th; Major Congdon July 15, and the staff at various dates from July 27 to September 5th, the only changes from the roster of the Light Guard being the election of 1st. Sergt. Aaron V. H. Doremus as 2d Lieut. of Company A in place of Wm. H. H. Stryker; the promotion of Surgeon Terriberry to the Brigade staff, leaving the position of Surgeon vacant until September 20, 1881, and the appointment of C. F. W. Myers as Assistant Surgeon. Surgeon Terriberry acted as Surgeon of the Battalion during the rifle shooting that year, however, by request of Major Congdon.

The first formal parade of the battalion was on Memorial Day, 1880, when it acted as escort to the local G. A. R. Posts.

On Dec. 28th, of that year, at the unveiling of the Statue of Maj. Gen. Philip Kearney in Military Park, Newark, the battalion made its debut with the Brigade. The *Army and Navy Journal* in commenting on that parade, says, "The First Battalion of Paterson, Major Congdon with a staff of six officers, well mounted, and two companies sixteen full files, was third in line. The battalion was well equipped, their seal skin shakos, handsome knapsacks and leather leggings adding to their fine appearance. The marching and alignments of the companies were splendid, and notwithstanding the cold weather the manual of arms on the march was of an excellent description. The battalion was the best organization in the column and frequently applauded."

On September 20th, 1881, the battalion again paraded with the Brigade in Newark, at the Garfield obsequies.

In this year the Legislature authorized the Governor "to organize a Provisional Battalion composed of companies selected from the whole body of the National Guard for their proficiency in drill and discipline and soldierly bearing, neatness in appointments and equipments, to be designated by inspection and competitive drill," to represent the state at the centennial anniversary of the surrender at Yorktown, Va.

Both companies, with their officers, were designated as two of the ten companies to form this battalion, and Major Congdon was appointed a special aid on the staff of the commandant, Col. and Brev. Brigg. Gen. E. Burd Grubb.

The Yorktown Battalion consisted of 10 companies, 32 all files = 640; 5 sergeants per company = 50; 1 Com-

missary per company = 10; Line Officers, 30; Field, Staff and Non-Commissioned Staff, 20; Supernumerary Officers, 12; Band Drum Corps, 80; total, 812.

The writer, who has seen hundreds of regiments, both in active service and National Guardsmen, has never seen a better one. The camp at Yorktown was an ideal as well as a real one, and the discipline was excellent.

The U. S. Centennial Commission notified Gen. Grubb that a silver vase costing \$1,000 manufactured by Tiffany & Co., of New York, was to be presented by the commissioners, "to the regiment or battalion which should, during the entire encampment, present the best military appearance." The review held by the President of the United States on this memorable battle field was a grand sight, and from the applause given to the New Jersey battalion on its march, it was evident that the fine appearance and soldierly bearing of the organization had won the approval of all who saw it. A committee of regular army officers acting as a board of inspection notified the commissioners that New Jersey's Provisional Battalion were entitled to the vase, and it was presented to the organization in front of the old Moore house. The battalion, which had gone to Yorktown by the way of Baltimore, and from there to Yorktown by steamer, returned home by the route of the Potomac River and Washington. On arriving in Washington the battalion paraded through some of the principal streets, and were reviewed by the General of the Army, Wm. T. Sherman. The citizens and those members of the battalion who had not been on the trip, tendered a fine reception and banquet to the Yorktown contingent.

The vase on the route was in charge of a guard of honor, Color Sergeant Florian Oborski of the First Battalion being one of them, and it was subsequently presented to the Legislature, while in session, Lieut. Angus of 3d Regt. and Lieut. Hilton of the First Battalion, acting as the vase bearers, at the presentation. The Legislature subsequently voted a medal to every member of the Provisional Battalion, in commemoration of New Jersey's achievements.

The next parade outside of Paterson that the First Battalion took part in, was on Memorial Day, 1882, when it paraded in New York, and was the guest of Hawkins Veteran Zouaves, formerly the 6th, N. Y. Vol's, Capt. Curie's old regiment.

The Zouaves had a medal struck off to commemorate this event.

The *Army and Navy Journal* says of this parade: "Conspicuous and deserving of special comment for their handsome and soldierly appearance was the Paterson Light Guard of New Jersey, who well sustained the high reputation won by them at Yorktown."

On June 15 of this year, the whole brigade had a field day at Santiago Park on the banks of the Passaic River. During the sham battle, which was a part of the exercises, Private Wm. E. Meller of Company B was accidentally shot in the leg with a blank cartridge by one of the men

in the rear ranks. At first it was not supposed to be dangerous, but he died in a few days, and he was buried with exceptional honors, the Brigade Commander and Staff and the whole of the battalion attending. Though the battalion has lost a number of members by death, Private Meller is the only member lost in service; but an ex-member, ex-Sergeant John E. Hartley of Company A, promoted as Major and Judge Advocate on the Brigade staff, subsequently died, caused by injuries received in a fall from his horse in the 1887 camp at Sea Girt.

On Jan. 25th, 1883, a new company, C, was mustered in the State service and attached to the battalion. Their armory was fixed at Continental Hall, corner of Main and Van Houten streets. Alexander T. Groser was commissioned as Captain, Wm. F. Decker as 1st Lieut., and Walter Van Emburgh as 2d Lieut., Feb. 10th, of that year.

Captain Groser and Lieut. Decker had graduated from Companies B and A respectively, and Lieut. Van Emburgh had served several years in the 2d Battalion at Hackensack.

The battalion of three companies made their first outdoor parade on the evening of May 25th, preliminary to the parade with the Brigade at Jersey City on Memorial Day.

In the two years' service that A and B had experienced in the National Guard they had been kept well up to military work, and they concluded to have a little of the fun, on the principle that "all work and no play makes Jack a dull boy."

It is true that they held two of the finest military balls that Paterson had ever witnessed, and as social events they were the leading features of the season; still they yearned for an outside trip, and voted to go to Saratoga, by way of Troy.

They decided to go as the "Paterson Light Guard," wearing their distinctive uniform of grey, supplemented by white flannel trousers, and their unique equipments.

Just before the hour of starting Captain Doremus, in behalf of the organization, stepped from the ranks and presented Major Congdon with a diamond badge, as a token of their esteem for him, and their appreciation of his services as commandant of the organization. It was a genuine surprise to the Major, and he feelingly responded to the sentiments expressed by the gift, and the remarks of Captain Doremus. The badge was the battalion escutcheon in gold, with diamonds set in the centre, and surrounding points, and was worth \$400.

They started on September 3d, 1883, leaving New York on the Steamer Drew, with Voss's 1st Reg't. N. G. N. J., band, which is a favorite with the battalion. Non-venir menu cards were printed by the steamer company, and coupled with the menu itself, and the evening concert by the band, made a delightful evening pass to all. A breakfast in the Delavan House in Albany the next morning put the party in excellent condition to meet the Trojans. A special boat carried the party to Troy, and

before the wharf was reached, cannons belched forth a greeting, and the cheers of the large crowd awaiting ensured a hearty welcome.

The local military, consisting of the Tibbets' Veteran Corps, Troy Citizens' Corps, Tibbets Cadets, and the Fourth Battery, were drawn up in line, and after the usual military salutes, the line of march was taken up. The excursion party consisted of 90 of the Guards and 21 invited guests, and no visiting party ever received a heartier welcome. Troy is noted for its military spirit and large hearts, and the applause accorded to the visitors made them feel about three inches taller. After the parade a banquet followed, accompanied by excellent music from Doring's celebrated band. The toasts were unique, and the responses very good. A general interchange of courtesies then followed, and at the hour of departure the visitors could scarcely tear themselves away.

The regular train had gone; a special was made up, and amid handshakings, a hundred "come and see us agains" and "come down and see us," cheers loud enough to raise the roof, and we were off for Saratoga. Arriving there the Saratoga Citizens' Corps awaited the party, and escorted the visitors to their quarters, the Grand Union Hotel. Mine host Clair had assigned one wing of that huge caravansary to the party and told them to enjoy themselves, and they did. The only military duty required of them was a dress parade and escort to the colors; the balance of the two days' stay being occupied as each individual saw fit. Excursions to Saratoga lake, a horseback parade, and a parody on it by the funny members of the party, who hired all the village carts in the place and decked themselves out with sunflowers, were some of the notable features of the stay. The officers of the Citizens' Corps tendered many courtesies which were appreciated. The undress parade in the hotel at midnight, the genial Capt. Beggs, commandant, was one of the funniest incidents of the trip, and is often spoken of to this day. But even fun must end some time, and on the 7th the pilgrims bid good bye to Saratoga, and its springs; its Citizens' Corps, and big hotels; and the steamer that left Albany that night carried a pretty tired party, who went to sleep a little earlier than they did on the up trip. A breakfast at the Metropolitan Hotel in New York closed one of the finest excursions that the organization ever had and reflected credit on the committee of arrangements, headed by Major Congdon and Quartermaster Himble. The fine executive ability possessed by the latter was never better exemplified than on this excursion.

The year 1884 was memorable from the visit to Paterson of one of the organizations who gave the Light Guard such a hearty reception at Troy, the Tibbets Veteran Corps.

No visit of this kind had taken place since before the war, and the battalion decided to make it warm for them, and show that Paterson was not devoid of a military or hospitable spirit. Joint committees of the soldiers and citizens were appointed, and they went to work with a vim.

The fatal accident and death of 2d Lieut. Robert J. Burke, Co. A., on May 11th, 1887, is the only loss of an officer in commission that the First Battalion has sustained. Lieut. Burke was a general favorite, and his death was much regretted.

The third calamity, for so it seemed, of the year, was the resignation of Lt. Col. Congdon on July 4th. A general feeling of depression ran through the battalion, while some of the local papers and the public talked as if the organization were going to the eternal bow-wows. But the able manner in which Major Muzzy handled the battalion in camp in August of that year, 1887, soon convinced the croakers that the organization was here to stay, and was too permanent in character to live or die by the existence of one man.

The camp in that year taught a number of new men in the battalion part of a soldier's life, and so far as the soldierly qualities were concerned, and the use of the organization as a military body, it was, if anything, stronger in those qualities than at any time in the past.

On Sept. 17th of this year a detachment of two provisional companies from the battalion consolidated with the Fourth Regiment to parade with the Second Brigade in Philadelphia, at the Centennial commemoration of the adoption of the National Constitution.

On June 30th, 1888, one provisional company took part with the First Regiment, N. G. N. J., in the dedication of the State monuments at Gettysburg, Pa., and were in camp several days on that memorable battle field.

The Centennial celebration of the inauguration of the first President of the United States, held in New York city on April 30th, 1887, brought the Division together once more, and the public press, the public themselves, and high military authority, concurred in the opinion that no State surpassed New Jersey in the appearance, equipments and soldierly bearing of her National Guard. It was a grand parade, and representative bodies were there from nearly every State in the Union, while it was estimated that a million of strangers were there as spectators. The battalion had taken part in the parade on the Centennial celebration of the evacuation of New York by the British, but neither the occasion, nor the day itself were equal in importance, or grander in effect, to the parade of 1887.

This year was also signalized by the 3d and best camp that the battalion had participated in. The work was harder, the discipline more strict, and the weather hotter than on any previous camp, but the command never did their duty more cheerfully. Each organization mounted Brigade guard in turn, and that guard was responsible for the protection of the camp for twenty-four hours. The work of the guard of the First Battalion was exceptionally good, and called forth commendation from Brigade Headquarters. More prisoners were caught trying to run the guard than all of the other organizations together had caught, and though this temporarily caused a little feeling with the other organizations, their officers subsequently

acknowledged that the guard was only doing its duty. The battalion marched from camp a stronger and better organization than it had ever been in the past, and it is hoped that it may continue in this high standard.

Space does not admit of speaking at length of all the social events that the battalion has been engaged in, but the annual balls that have been held were *the* events of the season, and were watched for eagerly by our own citizens and those of the surrounding country. The receptions to General L. Burd Grubb, General Steele, Governor Green and others; the balls devoted to charity, the Old Ladies' Home and St. Joseph's Hospital, where thousands of dollars were spent, or raised for those objects, are too fresh in the minds of our citizens to require repeating, and are but the adjuncts of this organization.

Other important parades and events have been associated with the history of the battalion, but this imperfect sketch is considered sufficient to show that the First Battalion, N. G. N. J., has been and is of some use. The moral effect and patriotic influence in our city has been good, and in this grand republic it is the duty of the city, county, and state, to properly support such an organization.

Our country does not want or require a standing army, but we must rely on our private citizens, our organized, and un-organized militia; and the State is remiss in its duty if it does not see to it that its citizens are taught the first principles of defence, either for inward strife, or outward conflict. Had the Northern States taken as much interest in their militia and military matters as the South did, the war of the rebellion would not have lasted as long. They were prepared for the conflict by almost universal military training. We were not. They were officered by skilled and competent officers in a short time. We had to educate ours in the field, at the expense of blood and lives. The writer was in a company during this struggle, not fifty per cent. of whom could hit a barn door at 100 yards; how different with the First Battalion!

The use of such an organization as a school for future officers, for learning the first principles of a soldier's duties, and for the education and teachings of discipline, is worth more than it costs.

The battalion has been honored by the promotion of a number of its members to the various staffs in the State, as follows:

John W. Bourne, Colonel and Adjutant, Governor's Staff.	
Charles Aznew, " " " " " "	
George W. Ferris, " " Surgeon, Division	"
William Stricker, Lieut. Col. and Quartermaster, " "	"
John E. Hartley, Major and Judge Advocate, Brigade	"
Robert L. Hopper, " " " " " "	"

Of the officers that the battalion has been honored with, Major Aaron V. H. Doremus, Captain James Beggs, Captain and Quartermaster John H. Hindle and Lieutenant Robert J. Burke are now dead.

FIELD PRACTICE OF THE FIRST BATTALION.

"The use of arms is the right of freemen," our Chaplain told us in his Memorial sermon the other day, May

20th, 1860, and he might have added, the knowledge of arms is the duty of freemen, and the citizen soldier, for unless the freeman or soldier has a knowledge of the use of his rifle, and its capability to perform the work for which it was constructed and placed in his hands, it is but a waste of time and words to place it there.

Given an equal number of men in two different organizations, one to be thoroughly drilled in the tactics, ceremonies and marching, but without the practical knowledge of the rifle; the other knowing only the rudiments of the drills, and not a word about a dress parade or review, but with the full knowledge and use of the rifle skilled to the point of hitting the mark at 200 to 500 yards whenever they choose, and I will take my chances with the latter organization every time. The individual knowledge and use of the rifle gives the soldier confidence in himself and his organization, and makes him feel that they are invincible. The lesson of the Boer war in South Africa, where the undisciplined Dutch burghers decimated the splendidly formed, disciplined and armed forces of England, was a lesson that every military man ought to study. While the English soldier is no mean adversary with a rifle, the Dutch Boer in this case was eminently his superior, and by that superiority they gained their freedom and autonomy for their land.

It is this knowledge that has caused the officers of the First Battalion to instil in the minds of their men, both by precept and example, this fundamental principle of the skilled soldier. Some officers have considered this branch of instruction both in theory and practice, more important than other officers do, and have made it a specialty, but, as with the other history of the organization, we are not ashamed of the rifle practice of the First Battalion.

It was inaugurated one Saturday afternoon in July, 1880, at Brinton Range near Elizabeth. The range was owned by a private association and leased on certain days by the State for the practice of the 1st Brigade. The party of officers and men that went down to the range that afternoon numbered but six or eight who expected to qualify as marksmen under the association rules, which was allowed by State regulation. Lieut. Hilton to his own surprise, as well as to the others, was the only one who did qualify, but during the balance of the season eighteen others made the requisite fifty per cent. of points and were honored with a marksman's badge.

Four of the original 10 are still members of the Battalion, viz: Capt. Wm. F. Decker, Adjutant John T. Hilton, 2d Lieut. Charles Reynolds and ex-Color Sergeant, and Private Edwin S. Brown. Capt. Decker and Lieut. Reynolds have qualified each year since that and now have the proud distinction of wearing the gold cross for 10 years' marksmanship.

Captain Albert Tilt was commissioned as Inspector of Rifle Practice August 5th, 1880. He was very proud of his department, and by his interest and cordial co-operation with the other officers of the battalion, proved himself to be an admirable acquisition to the organization. The

battalion gained a percentage of 22.88 that year which was higher than five regiments in the State, and gave us fourth place in line of merit, the highest percentage attained by any regiment or battalion in the State being 44.64.

That would not do for the First Battalion, and the next year, 1881, 60 marksmen qualified, and the battalion percentage jumped to second place in figure of merit, 51.42, or but 4.04 points below the highest.

In the figure of merit by companies, neither one of the companies then forming the battalion need hide their score sheets; Company A being the 6th in line, with a percentage of 50.00, and Company B a close 10th, with a percentage of 49.84.

The State regimental figure of merit had advanced nearly 11 points over the preceding year, and the season's shooting ended with the percentage of 55.46 to shoot at the next year.

In 1882 the battalion headed the State list with 86 marksmen and a percentage of 64.13, leading the next highest organization by 23.07 points. This improvement was due to the enthusiasm of the men on the subject, encouraged by the officers both in instruction, and the offering of a battalion prize badge for the best marksman. Company B had also offered a prize badge, and Lieut. Hilton, who was acting as Inspector of Rifle Practice during the absence of Captain Tilt in Europe, was also assigned by Captain Curie to the special duty of rifle instructor to this company.

The competition for the battalion badge was general, and was anybody's race up to October, when it practically narrowed down to four competitors, and the 30th of that month, the end of the season, saw Sergeant Decker the champion marksman of the battalion. As this competition was virtually the best schooling the battalion had experienced, and the results were far reaching, as the knowledge gained there is still in use with us, I take the liberty of giving the names and scores of the competitors:

	Scores.	Aggregate	Percent.
Sergeant Wm. F. Decker, Co. A	16, 15, 15	136	90
Private Wm. H. Smith, " "	16, 41, 43	133	88
Lieut. John T. Hilton, " B	15, 43, 43	131	87
Private Edwin S. Brown, " "	14, 42, 41	127	84

The conditions of the match called for the aggregate of the three best scores made by any of the competitors; 5 shots at the 200, and 5 shots at the 500 yard range; making a possible of 50 points for the 10 shots.

Company B's badge went to Lieut. Hilton, and when through force of circumstances he was forced to resign, he had the proud satisfaction of seeing his company at the head of the State list with a percentage of 73.00; Company A being third in line with a percentage of 59.11.

The battalion faced the targets in 1883 with a new company, C; and it was supposed we would lose our lead. But the men of that company were composed of soldier material and Sergeant Decker, now a Lieutenant in Company C, was the principal instructor. With such material and such an instructor it was no surprise to the writer to note that the battalion were still on top, with 114

marksmen and 61.83 as our figure of merit, leading the next regiment by 15.00 points.

Company C led the battalion, and was second in the State, by a percentage of 67.70. Company B followed next, both in battalion and State, with 64.00, and Company A followed third in the battalion, and sixth in the State with 58.36.

In 1884 nothing memorable occurred except that the scores and percentages were lower. The battalion wound up the season with 112 marksmen and a figure of merit of 57.93, the highest in the State. Company C kept her place both on Battalion and State list, by a percentage of 65.16. Company B while keeping her battalion place dropped down to fourth in the State list, and quit with 55.57.

Company A fired the worst, as she dropped to the eighth place on the State list, and lowered her percentage to 47.79.

The year 1885 was memorable from the large number of marksmen we had, 127, and the high percentage of the battalion, 69.55, and we were still in the lead.

It was especially memorable to Company C, as ex-Sergeant Decker of Company A was now Captain of C, and a rifle expert, and the company rolled up the highest percentage that had ever been achieved in the State, having 66.84 to her credit, and was the first on the State list. Company B followed second on both lists with 68.35, while Company A still kept her place on the battalion list, but went up one notch to 7th place on the State list.

The season of 1886 opened with a new Inspector for the battalion, Captain Tilt having resigned, and ex-Sergeant Edmund G. Edwards was commissioned Captain and Inspector of Rifle Practice Nov. 10th, 1885. Captain Edwards was a good rifle shot, and a competent instructor. His instruction aimed to school the men into calmness and judgment of their work, so that each shot would be a lesson for their next one. If, as some of the officers claim, that the scoring by the members of a battalion practicing did not give the true results that paid markers outside of the organization shooting would give, and that it was shown this year by the new system to be much lower in percentage, we still had the satisfaction of seeing that by the new system of paid scorers we could shoot as well as score, for we headed the State list this year with 42 marksmen, and 48.44 as our figure of merit.

Other organizations showed these low percentages also. The discharge of so many of the men of Companies A and B whose time had expired was also against us, and that fact is the more remarkable when we see that Company A had got tired of being on the bottom of the list, and had jumped to the top of both State and battalion list with a percentage of 52.60.

Company C followed next both in State and battalion list, with 50.75, while Company B had taken a drop to third in the battalion, and seventh in the State list, with 41.64 to its credit.

In 1887, for the first time since it gained it in 1882, the battalion lost its lead and came in second. The Second Regiment re-organized from the old 6th Regiment, had been creeping up on us, and now led the State.

We had 20 marksmen: 123 1st class; 25 2d class and 84 3d class shots, with a percentage of 41.30.

Our companies also lost their head and were rated on the State list as follows:

Company C, 5th, figure of merit.....	43.37
" A, 7th, " "	41.20
" B, 12th, " "	36.14

In 1887 the battalion was again in the lead with 81 marksmen, and an improved percentage of 48.03.

The offering of prize badges by Major Muzzy, Surgeon Myers, and Quartermaster Robert L. Hopper, for the best score of the season, and the establishment of a local range was no doubt the reason for this increase. The same reasons showed the same results in 1882, and was as strong an argument as any that could be adduced for the maintenance of local ranges, and incentives for good scores. Corporal Deitrich, of Co. C, won the Major's badge; Private Ranson, of Co. B, the Surgeon's badge; and Quartermaster Sergeant Muzzy the Quartermaster's badge. Company B had spurred herself and was second on the State list with 52.15 to her credit; being but 0.51 below the highest. Company C still retained her fifth place with 47.29; and Company A had dropped to tenth place with 41.44; a higher score than last year, but the percentages had advanced along the whole line of the State.

In 1884 the battalion was still in the lead with 66 marksmen; 74 first class men; 44 second class; and had a percentage of 49.87. While Company B had dropped back, the position of the companies as a whole was better, for they followed each other successively: Company C being third with 52.00, Company B being fourth with 49.83, and Company A being fifth with 45.07 as the figures of merit.

An Inter-State match was shot at the Sea Girt range this year by teams of 12, from New York, Delaware, and New Jersey; the First Battalion furnishing three men on the latter team, whose shooting was a credit to the organization they belonged to. They made an average of 83.00 per cent, ranking second, third, and sixth place on the team, and had the balance of the men done as well. New Jersey would have won the match, instead of losing it by 3 points.

As their personal scores are of interest and may be of use in the future I record them:

Team No.	Name.	Score at 200 Yards.	100	Total.
2	Capt. Wm. E. Decker.	46	10	86
3	Private John Ranson.	41	44	85
6	Color Sergeant Chris. Chinn.	43	37	80

An accident prevented Captain Decker from making a higher and the ranking score, but his work at this and other times in the past indicates that he is one of the best rifle shots in the State, and allied with Private Ranson can probably equal the score of any two men from any regiment or battalion in the State.

GATLING GUN PRACTICE.

On Jan. 14, 1880, Color Sergeant Florian Oborski was commissioned as First Lieutenant and Commandant of the Gun Squad, subsequently known as the Gun Detachment.

In the same year the Inspector General of Rifle Practice reports as follows: "The efficiency of the Gatling Gun when properly handled was never better demonstrated than on August 27th last, when General Sewell ordered Gatling Gun Co. "B" on the range for practice. The gun was sighted for 300 yards, each shot, and made 52 points out of a possible 75 equal to 69 per cent."

In the year following, and the first in camp and practice for Lt. Oborski's command, he tried his hand at shooting the gun and made 41 out of the possible 50, or 82 per cent, a good beginning. He also fired 300 shots in 58 seconds.

In the following camp, 1880, there was a competition between the First Battalion detachment and the Gatling Gun Co. A, manned by veterans of the late war. The First Battalion gun made 120 points to 110 of the other organization, but in volley firing the First Battalion gun fired 505 shots in 85 seconds, while Gatling Gun Co. A, fired 655 shots in 90 seconds, equal to 7.25 shots per second, or 0.25 of a shot in excess of the local gun. This speaks well for the First Battalion Gun Detachment, and we all regret the resignation of such a competent and enthusiastic officer as Lieut. Oborski.

INSPECTIONS OF THE FIRST BATTALION.

At the date of the mustering of the First Battalion into the National Guard of the State, the standard of the organizations was far below that of 1870. Though the Adjutant General in 1881 reports that "the high standard of drill and general efficiency of our several regiments and battalions have, I think, been fully maintained during the year," the detailed reports of the First and Second Brigade Inspectors do not show any such flattering picture. Isolated instances of companies and regiments merited this language of the Adjutant-General, but from the Brigade Inspector's reports, it would indicate that efficiency was the exception, and not the rule. The trouble was not so much with the men as with the officers, as the past and present

show, that with good officers our National Guard is equal to any emergency.

The improvement all along the line, and especially in the First Brigade is due to the improvement in the officers, and probably no cause for this improvement has been so potent as the mingling together of organizations and officers, at the various parades and camps, and lastly, as the writer believes, to the influence and high standard aimed at by the First Battalion. The battalion was composed for the most part of picked men, who took great pride in the organization. The Commandant was indefatigable in his efforts to make the organization as perfect as possible, and he was ably assisted by a competent corps of officers. Of the muster and inspection of the battalion in 1881, the Inspector-General says "but one officer and fourteen enlisted men were absent; companies parading an average of fifty-eight men, the highest for any battalion in the division. The command made an excellent appearance, is composed of good material; its discipline is superior, and *its esprit de corps* evident." The Brigade-Inspector Lt. Col. G. E. P. Howard reported: "This battalion is deserving of special mention for its proficiency in drill and the manual of arms, the result of hard work and careful attention to the tactics on the part of both officers and enlisted men."

In the limited space of this article it is impossible to quote the report of the Inspector for each year, and it is unnecessary to do so, as the following figures show a record not equalled by any regiment or battalion in the State.

FIRST BATTALION MUSTERS AND INSPECTION.

Year.	Total Strength,	Number Absent,	Percentage.
1880	126	—	100
1881	151	15	90
1882	153	13	91½
1883	202	17	91½
1884	207	12	94.2
1885	205	18	91.2
1886	246	13	94.7
1887	260	12	95½
1888	245	2	99.2
1889	238	13	94½
1890	215	1	99.53

TABULATED ROSTER OF OFFICERS OF THE FIRST BATTALION.

DATE OF COMMISSIONS, PROMOTIONS, RESIGNATIONS AND DEATHS.

FIELD AND STAFF.		Commissioned.	Promoted.	Resigned.
Lieut. Col.	Joseph W. Congdon	May 5, '85		July 4, '87
"	Samuel V. S. Muzzy	Dec. 12, '89		
Major	Joseph W. Congdon	July 15, '80	May 5th, '85	
"	Anton V. H. Doremus	May 5, '85		July 13, '85
"	Samuel V. S. Muzzy	April 6, '86	Dec. 12, '85	
"	John R. Beam	Dec. 12, '89		
Adjutant	James Dicks, Jr.	July 27, '80		Nov. 21, '85
"	John T. Hilton	Dec. 8, '85		
Quartermaster	John H. Hurdle	July 27, '80		Nov. 28, '87
"	Robert I. Hopper	Feb. 6, '88	*March 20, '89	
"	John H. Hopper	April 13, '89		
Paymaster	Alpheus S. Allen	July 27, '80		Sept. 30, '85
"	John L. Conklin	Nov. 19, '85		May 13, '90
Surgeon	Charles F. W. Myers	Sept. 29, '81		
Asst. Surgeon	Charles F. W. Myers	Sept. 10, '89	Sept. 29, '81	
"	Rush Neer	Sept. 29, '81		April 20, '86
"	Thomas E. O'Grady	July 22, '86		
Chaplain	Charles D. Shaw	Aug. 5, '80		
Judge Advocate	George S. Chiswell	Aug. 5, '80		Aug. 7, '86
"	Albert A. Wilcox	Sept. 8, '86		Oct. 24, '89
"	Robert Williams	April 14, '90		
Inspector of Rifle Practice	Albert Tilt	Aug. 5, '80		Sept. 30, '85
"	Edmund G. Edwards	Nov. 10, '85		
Lieut. of Gun Detachment	Florian Oborski	Jan. 11, '86		Sept. 10, '89
LINE OFFICERS.				
Co. A.—Captain	James Beggs	June 15, '80		March 27, '82
"	Anton V. H. Doremus	May 12, '82	May 5, '85	
"	Samuel V. S. Muzzy	May 21, '85	Dec. 12, '89	
"	John R. Beam	April 29, '86	Dec. 12, '89	
"	Henry Muzzy	Feb. 20, '90		
1st Lieutenant	John H. Berlin	June 15, '80		Sept. 15, '81
"	Anton V. H. Doremus	Oct. 14, '81	May 12, '82	
"	Samuel V. S. Muzzy	May 12, '82	May 21, '85	
"	John R. Beam	May 21, '85	April 29, '86	
"	Henry Muzzy	April 29, '86	Feb. 20, '90	
"	Joseph C. Earsshaw	Feb. 20, '90		
2d Lieutenant	Anton V. H. Doremus	June 15, '80	Oct. 14, '81	
"	Samuel V. S. Muzzy	Oct. 10, '81	May 12, '82	
"	John R. Beam	May 12, '82	May 21, '85	
"	John C. Bowering	May 21, '85		Feb. 11, '86
"	Henry Muzzy	March 18, '86	April 29, '86	
"	Robert J. Barker	July 22, '86		
"	Joseph C. Earsshaw	June 23, '87	Feb. 20, '90	
"	Robert H. Stierett	Feb. 20, '90		
Co. B.—Captain	Charles Curie	June 15, '80		Feb. 5, '83
"	James Beggs	April 23, '83		Nov. 24, '84
"	Samuel Thorp	Feb. 10, '85		May 30th, '86
"	Robert H. Fordyce	July 22, '86		
1st Lieutenant	Alexander T. Grosor	June 15, '80		May 3, '82
"	Samuel Thorp	June 20, '82	Feb. 10, '85	
"	Robert H. Fordyce	Feb. 10, '85	July 22, '86	
"	Augustus Van Gieson	July 22, '86		
2d Lieutenant	John T. Hilton	June 15, '80		May 2, '83
"	Robert H. Fordyce	May 25, '83	Feb. 10, '85	
"	Frederick T. Vandervoort	Feb. 10, '85		Jan. 25, '86
"	Augustus Van Gieson	March 16, '86	July 22, '86	
"	Charles Reynolds	July 22, '86		
Co. C.—Captain	Alexander T. Grosor	Feb. 26, '83		Nov. 17, '84
"	William F. Decker	Jan. 9, '85		
1st Lieutenant	William F. Decker	Feb. 26, '83	Jan. 9, '85	
"	Walter Van Emburgh	Jan. 9, '85		July 23, '89
"	James Parker	Aug. 16, '89		
2d Lieutenant	Walter Van Emburgh	Feb. 26, '83	Jan. 9, '85	
"	James Parker	Jan. 9, '85	Aug. 16, '89	
"	Cornelius V. W. Fonda	Aug. 16, '89		

*To Brigade Staff as Judge Advocate, Major. †Died May 11, 1875, while in commission.

Some Old Paterson Houses.

By WM. NELSON, Attorney-at-Law and Corresponding Secretary of New Jersey Historical Society.

THE wonderful transformation that has come over the city of Paterson within a few years is emphasized by the presence here and there of a relic of other days in the shape of an old-fashioned stone house, dating back to the time when the Dutch were almost the only residents in this part of the country. These ancient dwellings are generally of one type—long and low, seldom more than one-story in height, with gambrel roof rising high up in the air, affording space for several rooms under it, besides a capacious attic above all. Broad and low, like their old-time builders, these houses were erected to stand for generations. But alas! as generation after generation has arisen, the old houses have been deserted by them, one by one, until there is not a dwelling within the limits of the city of Paterson that has been occupied by one family for a century. Let us briefly mention a few of these ancient landmarks before their very memory is forgotten.

The most famous of ancient houses in Paterson is the Passaic hotel, on River street, at the foot of Bank street. When it was erected it is impossible to tell, but probably about the year 1771, by Abraham Godwin, in whose family it remained as a tavern for sixty years.

A short distance further west, in the same street, is another old stone house, which preserves its ancient appearance unchanged. It was probably erected by Cornelius Van Winkle, about the year 1770, but passed out of the hands of the family many years ago.

The old house standing on Madison avenue near what is now called Park avenue, was occupied by John P. Merselis about the beginning of this century, which it perhaps antedates by twenty years.

The stone house at the corner of Market street and the West road is from eighty to one hundred years old. It was originally occupied by one of the Merselis family, but long since passed out of their hands.

The other stone houses in that neighborhood are from fifty to seventy years old.

It is doubtful if in the whole of the Third Ward of Paterson there are any buildings older than Brown's tannery, in Main street between Fair and Division. The brick stores on the northeast corner of Broadway and Main street were erected in 1810-20, and are among the very oldest structures in that Ward.

In the whole of the First Ward of Paterson there probably is not a building standing that dates back to 1820.

In the Second Ward there are two or three that antedate this century. One is on Totowa avenue near Paterson avenue, thought to be a century old. Another is the Van Houten homestead, on Totowa avenue near the West Side Park. The small house on Jasper street just north of Doremus street was built fully seventy-five years ago. The large brick and stone house on Hamburg avenue, near Doremus street, occupied by Miss Westerfield, was erected about sixty years since.

In all probability the oldest house in the city of Paterson is the Doremus homestead, on Water street, between Hamburg avenue and Temple street. In 1708 Gerrebrandt Van Houten, Helmeigh Van Houten his brother, Martin Ryerson and Abraham Godwin bought of the executors of Henry Broekholst a tract of 928 acres, extending from the Passaic river back to the mountain, and from the line of the present Marion street to the line of Clinton street. They subdivided the tract in the spring of 1709 into seven smaller lots, of which Gerrebrandt Van Houten took one lying between Clinton and Northwest streets, and extending back to the line of the present Doremus street extended. It is believed that in the summer of 1709, if not earlier, he erected the eastern half of the present Doremus homestead. His grandson, Gerrebrandt Van Houten, who was President of the original Paterson Bank, and the leading capitalist of his day, erected the western part of the building about 1822. His daughter Catharine married Ralph Doremus, who in 1825 erected the brick mansion on the corner of Water and Albion streets, in its day the handsomest dwelling in Paterson. After the death of

Judge Van Houten, in 1829, Mr. Doremus occupied the whole of the old stone homestead, with his wife and children—Henry C. and Francis E. Doremus until his death in 1886. His son Henry's family continued in the occupancy of the western part of the building until June 11, 1890, when they, too, left the ancient homestead, after it had been occupied by the family for a period of more than one hundred and twenty years. No other house standing in Paterson has been occupied by one family for anything like a similar period of time. This old house is typical of its class, and therefore a description of it may be of interest. The older part, on the east, formerly had but one great living room on the ground floor, with kitchen extension; the front door, opening on the street, had half-doors until about twenty years since. In the upper part, under the roof, there were four sleeping rooms. The western or more modern portion, is divided into four rooms on the first floor, two on each side, separated by a hallway ten

feet wide extending from the front to rear. On the east is a double parlor, and on the west a dining room and kitchen. As will be seen by the accompanying illustration the house is but one-story high under the eaves, but the roof is so lofty that there is a spacious second story, with six rooms, and an ample attic overhead.

There is something sad in the thought that these old houses are destined to give way to more modern structures, to be occupied by those who are strangers to all the joys and all the sorrows that have been experienced under these ancient roofs. But there is something consoling in the fact that the modern houses, after all, have comforts and conveniences that the old had not, and that under these modern roofs there may be at least as much of joy and perhaps less of sorrow than under the old. And yet, while it is with gladness that we bring out the old, ring in the new, we cannot but feel a sympathetic interest in these relics of other days—the ancient stone houses of Paterson.

— — — Cemeteries. — — —

CEDAR LAWN CEMETERY.

In 1895 a number of gentlemen, deeming the time ripe for a new cemetery, secured from the legislature an act, approved March 28, 1895, incorporating "The Cedar Cliff Cemetery Company," "for the purpose of establishing a public burying ground in the city of Paterson." No steps were taken to organize the company, and in the fall of 1896 several other gentlemen became impressed with the beauty and fitness of the location of the present Cedar Lawn for a cemetery, and obtaining control of the above charter, they subscribed the requisite amount of stock, October 16, 1896, and at a meeting of the stockholders, held at Berry's hotel, Oct. 25th, at which Mr. John J. Brown was chairman, and Mr. Adam Carr secretary, they elected as Directors Messrs. Franklin C. Beckwith, Thomas Barbour, Thomas D. Hoxsey, Adam Carr, Henry B. Crosby, William S. Kinch and James Crooks. Mr. Beckwith was elected president and Mr. Carr secretary and treasurer of the company. The next month General Egbert L. Viele was engaged to lay out the grounds, which he praised very highly after viewing them. The name of the cemetery had meantime been discussed at length: "Cedar Grove" was agreed upon, then "Sacred Rest," and finally "Cedar Lawn Cemetery," and by a supplement (approved March 4, 1897) to the act of incorporation of C.

ation that name was fixed upon, and its appropriateness has never been questioned since.

The nineteenth day of September, 1897, witnessed the dedication of Cedar Lawn—the first rural cemetery in this section of the State. The event excited a great and general interest in the community, and the procession to the grounds included most of the city and county officials, the clergy, several civic societies, and large numbers of citizens, who walked all the way to the cemetery. The Seventh Regiment band from New York furnished the music.

The land selected for the cemetery was comprised in three farms, owned by Hartman Van Ripet, Garret Demarest and David Demarest, embracing about two hundred and fifty acres, extending from the Dundee Lake westerly almost to the Erie Railway. As the charter of the company authorized the holding of only one hundred acres, all above that was sold, and formed the site whereon the village of Lakeview was located. The section reserved for the city of the dead is rectangular in shape, being about sixteen hundred feet from east to west, and about twenty-four hundred feet from north to south. The location was pronounced by General Viele to be the finest he had ever seen for the purpose, and it is the general opinion of all who have visited it that no lovelier spot could have been found wherein to lay the departed.

In the foreground is Dundee Lake, the charming sheet of water formed by the expansion of the Passaic river for three or four miles. On the opposite side of the water are handsome country houses, green meadows and well cultivated fields, with nothing to mar the prospect. Along the hither shore, the ancient Wesel road, one of the favorite drives near the city, runs between the lake and the cemetery. The land then stretches in a level greensward westerly for six or eight hundred feet, forming a beautiful lawn, which is preferred by very many for burial places. In this valley, as it were, there seems to be something peculiarly suggestive of rest. From this gentle vale there rises a hill with not too steep an ascent, to a height of perhaps one hundred feet above the lawn at its base. This hillside is dotted all over with graves, while its summit has been regarded as a peculiarly choice situation. And no wonder. It is illuminated by the dawn's first blush, emblem of the eternal day which all who there repose are waiting to rise and greet; it commands a wide reaching view of other hills, stretching farther and farther away, and higher still, till in the distance they merge into heaven's azure, even as have the spirits whose earthly habitations are here; and on this hill, as on those in the far distance, there rests a perpetual peace, such as all hope to find after this life's troubles are ended.

There is something surpassingly lovely in the view from the higher parts of the cemetery—the meadow and the lake below; the placid fields and blue hills of Bergen County, rising into the Palisades far away in the east; the tree clad hills toward the south, in the direction of Passaic; the bold cliffs of Garret or Wesel mountain in the west, and the rugged Preakness range rising higher beyond; and the groves and heights to the north—all combined compose a scene whose quiet beauty never fails to make an undying impression upon the beholder. About the whole prospect, and especially about the cemetery itself, there dwells such an atmosphere of absolute repose that thousands come here weekly to enjoy the perfect tranquility which soothes and cheers the tired worker.

The site selected for the cemetery has the double advantage of being reasonably near the city and at the same time in such a retired nook that it can never be an obstruction to the city's growth—a fortunate circumstance, when we consider how ruthlessly the march of improvement tramples over everything which hinders its progress. But there are other guarantees that this hallowed ground shall never be profoundly disturbed in the interest of Mammon. The barriers here erected by nature are a still stronger assurance than human laws or human pledges. The lake on the east and the hill on the west prevent encroachments from those directions and there can never be any occasion for traversing the grounds from north to south, when there are two such fine thoroughfares as the Wesel road and Lake View avenue on each side and within a few hundred feet of each other. Again: It is quite out of the direct line of the city's progress. It is in the extreme southeast corner of

the corporation limits and so isolated that the city might grow close up to it and the cemetery would still retain its air of sweet solitude and rural beauty. In a cemetery there is no more important consideration than its security from intrusion—its permanence. There is something revolting in the thought of disturbing the dead, no matter how urgent may seem the demands of the living, and when we lay our loved ones under the sod we want to feel assured that they have found their last resting place on earth which none shall ever begrudge them.

Few cemeteries anywhere have such facilities of access as Cedar Lawn. It is reached from any part of Paterson by horse cars. Market street, one of the main thoroughfares of the city runs directly thither. Other routes are by way of Park avenue and Vreeland avenue; Main street and Crooks avenue; Market street, Trenton and Buffalo avenues; or Market street and Lake View avenue. The main entrance is within three miles of the City Hall, in a straight line, thirty minutes' ride in the horse cars. The remotest point within the city limits is but six miles distant, or within an hour's ride. The gate house is scarcely three miles from the neighboring city of Passaic, to which there is a delightful drive by the Wesel road, or by Crooks avenue and Main street. The direct road to Hackensack, the beautiful court house town of Bergen County, is close at hand, and an hour's drive brings us thither. Over all these roads almost daily may be seen solemn funeral processions wending their way to Cedar Lawn.

The railroad facilities are also an important feature. The New York, Susquehanna and Western railroad has a station within half a mile of the entrance to the cemetery. The Erie Railway has a station at Lake View within a mile and a half of the gate house, and another nearer the centre of Paterson, two and a half miles from Cedar Lawn, connecting there with the horse cars. The Delaware, Lackawanna & Western Railroad has two stations within three miles of the cemetery. The remains of persons from a distance are frequently brought over these different railroads to be interred in this favorite place of sepulture, which can be reached in less than an hour and a half from the City Hall in New York, by any of these routes. Thus it is quite as convenient of access from New York or Jersey City as Greenwood, Woodlawn or Cypress Hill.

For this, among other reasons, not a few lot owners at these cemeteries have bought plots at Cedar Lawn and bury their dead here in preference to elsewhere.

The interments in the cemetery number over ten thousand.

The following are the present officers of the company:—President, H. B. Crosby; vice president, John J. Brown; treasurer, G. A. Hobart; secretary, George H. Albott; superintendent, Sidney Heminsley; Board of Directors:—Robert Barbour, A. W. Bishop, Edmund G. Edwards, William H. Williams, H. B. Crosby, John J. Brown, G. A. Hobart, James Inglis, Jr., Charles L. Hindle.

LAUREL GROVE CEMETERY.

In 1872 several of the leading citizens of Paterson realized that the time was not far distant when the cemeteries then in use would be wholly inadequate to meet the needs of the people. In that year through the efforts of the late Charles Hemingway, then a member of the House of Assembly from Passaic County, the charter of the Laurel Grove Cemetery Company was granted by the Legislature and in it the following gentlemen were named as incorporators: John H. Hindle, Hiram Gould, Albert A. Van Voorhies, Joseph R. Baldwin, Alpheus S. Allen, John Beaumont, George J. Hopper, Harmon Hockenberry, Charles Hemingway, Henry A. Hopper, Garret A. Hobart and James W. Ensign.

The death of Charles Hemingway in January, 1873, followed by the panic in the fall of that year, caused delay in the formal organizing of the company—and the idea of opening another cemetery was allowed to sleep until the summer of 1887. The deplorable condition of the Sandy Hill Cemeteries was then brought to public notice by the reports of the Paterson Board of Health. There was a strong public demand for another cemetery where lots could be purchased by people of moderate means at reasonable prices. Through the instrumentality of Mr. James A. Morrisse a sufficient amount of money was subscribed by several of the leading citizens to enable the company to purchase the present site. A meeting of the original incorporators was held and those who did not desire to take stock in the company resigned and others were elected in their stead.

The company was at once placed on a solid financial basis and the work of laying out the grounds was the absorbing topic of discussion. It was soon determined that the "Lawn System" should be adopted, and Mr. John Y. Culyer, who was for twenty years Landscape Engineer and Superintendent of Prospect Park, Brooklyn, was selected to take charge of this department and the work that he has already done shows that the company made a wise selection.

The cemetery is situated about half-a-mile in a south-westerly direction from the city of Paterson and contains about 135 acres of land. It has the Passaic river, the Delaware, Lackawanna and Western Railroad, and the Breakneck road for its boundaries and can never be encroached upon by the growth of the surrounding country and will never retard development.

The soil being sand, loam, and gravel is admirably adapted for burial purposes.

The general contour of the ground is such that on inspection one cannot but be charmed with the work of nature upon it before it was touched by the hand of man.

The surface ranges from six to one hundred and forty feet above the river road and the ascent is so gradual that the highest point can be approached by carriages with the greatest ease.

Standing on its summit and looking to the northeast you behold the city of Paterson. You see her beautiful dwell-

ings and churches, her large factories and mills, and the volume of smoke and steam that you see floating from the tops of those lofty chimneys tells you of the activity and work that is going on there. On the west we have the Breakneck mountains and on the south you behold the mountains of Orange, Bloomfield and Montclair; and you behold the Passaic river quietly following its winding course through the beautiful valley, hastening on toward the busy city to do its part in perpetuating the union of the spindle and the loom. Thus, far removed from activity and noise, you are in a position to appreciate the beauty that surrounds this spot as well as the place itself.

Here may be found quiet woods, smooth lawns and shady avenues moulded together by the hand of nature and man into one lovely natural park, alike a fit resort of recreation for the living and holy resting place for the dead.

The beautiful and ornamental lake in the centre surrounded as it is by a grove and fragrant flowers make it one of the most attractive scenes in the whole place.

Another charming spot is the island in the centre of the river, which is to be connected with the main cemetery grounds by a bridge, and this with the other timbered parts being supplied with settees will afford a pleasant retreat to persons who desire to spend a few hours in the country air.

The cemetery is so far removed from the centre of the city as to render it free from all the dangers of encroachment to which most cemeteries lying in the immediate suburbs of large cities are liable; while the fact that the Paterson horse cars will run continuously to and from the grounds will render it easy of access for our patrons. In the summer months steamboats will ply between the cemetery and the Great Falls of Passaic.

Already over three miles of road have been constructed in the grounds and most of it macadamized. And the large number of daily visitors show how these drives are appreciated by the people. Large sewers have also been built to protect the grounds from destruction by surface water and heavy rains.

A commodious receiving vault with all the modern improvements and a handsome brown stone entrance lodge containing reception rooms and offices have also been erected on the premises.

In furtherance of the "Lawn System" all lot enclosures are absolutely prohibited. Their absence makes it possible to secure what their presence would not permit of, an absolute neatness and order in the appearance of the lots by a free and continuous use of the scythe and lawn-mower; moreover where posers or copings exist, there must always abound around them, in a greater or less degree, a growth of weeds and briars. This evil thus is obviated.

Again: The appearance of the cemetery as a whole is much more pleasing, where enclosures do not exist. The superiority of a clean shaven expanse of lawn broken only by paths, trees and monuments, over that of grounds cov-

ered with railings and other enclosures in various stages of decay, requires no sophistry to make manifest.

Experience, too, has demonstrated that even where the greatest vigilance is exercised, lot enclosures speedily become dilapidated. Atmospheric influences invariably produce this result. And as the expense incidental to the maintenance of these enclosures is very considerable, the result being worse than useless, the money so expended might better have been thrown away. The popular belief that lots are safer, if enclosed, while it may be well founded in the case of some isolated burial places, has no application in the case of this cemetery, which will be carefully guarded and whose interior arrangements will be supervised and administered by the cemetery authorities themselves.

It would be impossible, under the system the directors have adopted, for anything resembling what lot owners regard as intrusion on their lots to occur; but even were this possible, it is very certain that neither copings nor fences would afford any real protection.

The entire cemetery will thus appear as one vast rolling sea of lawn, unmarred by any of the monstrous designs or gloomy walls or railings which make so many burial grounds objects of horror, when contemplated as our final resting place. Provisions have been made for the careful cutting of the grass on *all* lots with lawn mowers, to perform which a force of workmen will be organized, and it will be unnecessary for lot owners to make any expenditure of money for the care of the grass upon their lots.

The company provide and spread on the lot at all funerals heavy matting to protect the friends at the grave from the dampness of the ground; a temporary tent is also erected to shelter persons from the storms or wind or the hot sun in summer, and the grounds are carefully guarded day and night.

The situation along the line of the Delaware, Lackawanna and Western railroad is an important feature because of the opportunity which it affords to residents of New York, Jersey City and Hoboken to secure a suitable burial place at a moderate price in such a beautiful spot, saving to them too great an expense and trouble to which they now have to go to reach Greenwood and other local cemeteries.

A station has been erected on the grounds and funerals are met by the hearse provided by the company to convey the remains to the plot for interment.

The company commenced selling lots in April, 1888, and since that time two hundred and twenty-five lots have been sold. Several splendid monuments have already been erected. The cemetery was formally dedicated on Memorial Day, May 30, 1890—and the following gentlemen took part in the exercises:—Rev. Charles D. Shaw, D. D., Rev. David Magie, D. D.; Rev. J. C. Jackson, Rev. N. H. Van Arsdale, D. D. Mr. Francis C. Van Dyk read a historical sketch of the company and Col. Joseph W. Congdon delivered the dedicatory oration. The music was furnished by Cappa's Seventh regiment band of New York and the singing was by a chorus from the class of '91 of the Paterson High school—under the direction of Mr. Charles C. King and W. M. Dufford.

The officers of the company are as follows:—President, James W. Ensign; vice president, Francis C. Van Dyk; treasurer, George C. Mason; secretary, Michael Dunn. Directors:—William T. Ryle, Hiram Gould, James A. Morrisse, George C. Mason, Francis C. Van Dyk, James W. Ensign, John Norwood, James O'Shea, John R. Beam, Michael Dunn; clerk, Charles C. King; superintendent, M. M. Brunner—office 293 Main street, Paterson.



Building and Loan Associations.

By Mr. SIDNEY FARRAR, Secretary of the Paterson and Union B. & L. Associations.



WHEN Adam and Eve found themselves shut out of Eden, alone in the wide, wide world, houseless and homeless, they must have fully realized three conditions of existence from which not one of their countless descendants has ever since been free. That is to say: We must

have food to eat, clothing to wear and a place of shelter in which to rest and sleep. In short, we must have a home. Man, the noblest of God's creatures on the earth in his maturity and strength, is also the most helpless in his infancy, but man's necessity has always proved his best opportunity and has furnished him with the highest incentives to provide for those dependent on him not only sufficiently but abundantly, and his faculties thus industriously developed have taught him to have faith in himself, to believe that there is nothing that is impossible, for what one man cannot accomplish alone a greater number can do and do easily. And how natural it is, to turn to our friends in time of need or danger. Indeed nothing could be more natural than the transition from self-reliance to mutual-helpfulness, or as we sometimes call it "co-operation," nor more beneficial to society when rightly directed. And its possible applications are almost boundless. One of its familiar forms is the well known building and loan associations, which have found so much favor and gained so much in public esteem for the great amount of good they have done, and will undoubtedly continue to do.

These institutions have long been in successful operation both in England and in this country, notably here in the city of Philadelphia, whence they have been copied and imitated far and wide. While the individual associations differ so much in minor details that scarcely two are exactly alike; yet they all agree in the fundamental principles of mutual interest and mutual benefits to all the members; this remark applies to all such societies as are organized and operated strictly as local associations.

The Legislature of this State early took note of the useful character of mutual, loan, homestead, and building as-

sociations, and has always dealt with them in a most liberal manner.

The starting point then in the formation of a building and loan association is this knowledge of men's physical necessities already alluded to, and of his ability to provide for and overcome them by the co-operation or union of intelligent people, united together by the strong ties of mutual interest and mutual help, drilled and trained to perform systematically, of their own good freewill, certain duties within a specified time, in order to secure for themselves and each other the reward—a home, or its equivalent in money. The logical result with good careful management is guaranteed success, for a genuine association has no humbug about it; it has no land to sell, no particular style of house to build, and no pet contractor to back. It deals in money as its article of merchandise, making itself the banker and investor for its members, and has no other object than to obtain the best possible result for each and every one, to help each member in turn according to his particular need to the utmost of its ability, and not expecting to be too much thanked for doing it. A few common sense principles are observed and they are as true as they are useful.

The Association deals in money, and the original law still holds good: "And God said, let everything bring forth after his own kind." Later it was said, "Whatsoever ye sow that shall ye also reap," and we hear in our own times "money makes money," and "time is money." The Association understands that it takes time to make money, that it is necessary to sow money if we expect to reap money, and that we must sow liberally if we expect to reap abundantly; but while the Association holds out no prospect of giving something for nothing it has been demonstrated even here that the system is eminently equitable, entirely practical and has been found to be thoroughly successful. It is considered as an every day fact that the proper rent of a house will buy it in ten years. Now if this is true any system that will en-

able the tenant to become the owner in ten years to turn his rent into the purchase money for the house, and thus virtually enable him to make a present of the house to himself, and do this justly too to the former landlord, must be "a good thing" not only for the buyer, but also for the seller, for he gets his full price, and the community has gained another responsible citizen.

WHAT IS A MUTUAL BUILDING AND LOAN ASSOCIATION?

As we have them in Paterson any convenient number of persons associated together for that purpose under the laws of the State of New Jersey, by such name as they may select, who after adopting a constitution and by-laws and executing a certificate to be filed with the County Clerk, setting forth their corporate name and the objects of the Association, proceed to elect their proper officers, usually a president, vice president, treasurer, secretary, a board of directors, auditors, and solicitor, and then proceed to business. Now suppose we illustrate the working of an Association by joining one. Let us suppose that we enter in January; we find the secretary and inform him that we have elected ourselves to membership. We will take out one share and pay him the admission fee, also we pay him one dollar for monthly dues for January and provide that on or before a certain day in February we will pay another dollar, and so continue to pay one dollar per month until the money we have thus paid to the Association and the profits made on all such payments by the Association shall amount to the sum of \$200; then it is agreed that our membership so far as that one share is concerned shall cease, or in other words, that we shall be paid the two hundred dollars, unless we have previously withdrawn, which we can always do if needful. So it is plain that we have made up our minds to save two hundred dollars, and if we are trying to do that then it is our privilege to borrow two hundred dollars for every share we hold, provided we can give good security—that is a bond and mortgage on a house and lot or on a lot on which we will forthwith build a house; of course we cannot build a house for two hundred dollars—but we can take out some more shares—for they are all alike, say nine more shares, and then we can borrow two thousand dollars and that will build us a good house; the secretary tells us if we take ten shares and borrow two thousand dollars, we will have to pay ten dollars a month on our shares and another ten dollars per month as interest at six per cent. on the two thousand dollars we have borrowed; that will be all right for the rent of the house will be sufficient to pay that; the taxes, insurance, and the wear and tear we can look after ourselves, for we feel sure the property will more than offset that cost in the increased valuation; besides the wear and tear will not amount to much for it is our own house and we shall not only take good care of it, but even improve it constantly from year to year. We learn also from the constitution that we have the privilege to pay off the principal of our debt at any time. Even so small a sum as one dollar will be cheerfully received and the in-

terest at once cease on all such payments of the principal; that certainly is a great privilege, but then the Association can always use its money to advantage, for about one member in every four becomes sooner or later a borrower, so there is always a good demand for money even in dull times, for if the members do not want to borrow money to buy land and build houses, they want it to live on or for other purposes. So the supply and the demand keep about even pace with each other.

All that seems simple enough; we can take out shares and save up money if we do not wish to borrow—and when we wish to borrow we shall be qualified to do so, and when we want to take our money out all we have to do is to ask for it and we shall get it. The Association is established for our benefit, and all we have to do is to make use of it in the most serviceable manner.

We learn also to be punctual in our payments as well as thrifty and saving, for if we are late in paying our monthly dues and interest we are liable to a fine; but we will not be fined because we will take good care to pay in good *time*. Sometimes a member who has been diligently saving his money happens to get sick, or out of work or wants to buy a lot or something else, and so he needs or thinks he needs money. Such a member can either exchange his shares for those of a later series or he can borrow as much on his book as he has paid in as dues without any other security than his book, or he can withdraw his money altogether with interest to date and full profits up to the end of the preceeding year; if he elects to exchange his shares the admission fees are saved to him. So his money is always at his command whenever he needs it, and thousands of dollars are paid out every month in this manner. In short the building and loan association is a sort of wholesale dealer in bonds and mortgages, a firm of unlimited membership on equal terms and conditions, where the lending member can pay in his money from month to month, and know to a certainty that it is safely invested, and where he will be able to get it whenever he happens to need it.

These associations have now been established here nearly twelve years. The Paterson Mutual Building and Loan Association was instituted November 14th, 1878, and although its progress at first was slow, yet its business was so equitably conducted, and the business forms adopted so well suited to its special work that it has served as the model for at least a dozen others in Paterson and elsewhere. In the high character of its various boards of directors, and other officers, it has been most fortunate, and their careful and discreet management of its affairs is amply attested by an examination of its books of account, by which we learn that the gross amount received up to June 1, 1890, has amounted to \$725,323.32; its present membership is 500 persons holding 3,525 shares of the various series; more than three times as many shares have been paid off since its organization.

A direct offshoot of the Paterson Mutual Building and Loan Association was organized November 14, 1882,

under the name of the Union Mutual Building and Loan Association, and aided by the experience gained by its projectors in the parent body, this Association has made notable progress. Its books show a present membership of 1,000 persons holding 13,206 shares of all series, and its gross receipts up to June 1, 1860, amount to \$1,141-85-45; the gross receipts of these two associations combined amount to \$1,867-138-77. Their combined efforts are represented by about eight hundred houses built and building, besides being of great assistance to thousands of members in money, loans, and many other ways, especially in the correction of imperfect titles, advice, &c. There are also established in the city many other sturdy and vigorous building and loan associations: The Mechanics, The Celtic, The Iron and Silk, The People's, The Riverside, The Provident, &c., &c., and from trustworthy information they are all doing a most prosperous and satisfactory business. Undoubtedly this notice would be quite incomplete if we omitted to speak of the kindness of the press of this city towards this movement at all times

and under all circumstances. The public press recognizing that building and loan associations properly conducted materially increase the prosperity of a city, has been the stalwart friend of the building associations.

We think then this record needs no further comment; the work these associations have done for our city is there to be seen and judged by all men who will take the pains to examine it; that it has been sound needs no further proof than that we never hear of any foreclosures or law suits or matters of that character wherein any of the various associations appear either as plaintiff or defendant; on the contrary this principle, mutual co-operation, so simple, so efficient and so beneficial, has proved itself so excellent in actual practice that it is copied not only in our own city, more and more, but all the surrounding towns and villages are anxious to secure the same benefits for themselves. Passaic, Hackensack, Ridgewood, Little Falls, Haledon, and Sullern have flourishing associations; some also even in New York city, being direct results of the original establishment of the system here in 1878.

Telephone Facilities.



HE engraving on page 63 represents the switch board of The New York and New Jersey Telephone Co. in their central office at 207 Main street, Paterson, N. J.

Nearly 600 subscribers are now connected with the Paterson central, and trunk lines connect it with other cities. The operators answer and connect about 3,500 local calls daily, and over 250 calls are made each day between Paterson and other places. This switch board is one of the best in use. The space required to work it is reduced to a minimum, which enables the operators to connect subscribers quickly. Electric power is used for running a generator to call subscribers.

It will, undoubtedly, be of interest to give a brief history of the telephone business in this city. Work was begun to establish a Telephone Exchange here and connect it with New York City on December 6, 1879, with offices in the Clark Building, corner Main and Ellison streets. The exchange opened for business on the afternoon of December 24, 1879, with the following list of subscribers: Paterson Daily Press, Paterson Daily Guardian,

R. & H. Adams, Phoenix Manufacturing Co., Post Office, Morton Clark, H. J. Garrison, Hamilton House, P. H. & W. G. Shields, John Hopper & Son, Chris. Huber.

A wire was run between Paterson and New York and telephonic communication was established with that city December 28, 1879.

In May, 1880, the list numbered 145 subscribers.

During the summer of 1880 work was begun on additional trunk lines between Paterson and New York over the highway and through Passaic City, where an office was established. This line was finished in time to begin business in November, 1880, with New York, Newark, Jersey City and Passaic.

The telephone business in Paterson then began to grow rapidly. In the spring of 1882 a line was built to Boonton connecting the intermediate villages of Little Falls and Mountain View. A line was also extended to Butler. Later Wortendyke, Ridgewood and Haledon were connected and now there is no suburb of Paterson that cannot be reached by telephone. The excellent telephone service rendered between Paterson and Passaic is doing much to bring these two cities together. Subscribers in Paterson,

Passaic and Hackensack have the privilege of talking with each other without extra charge.

In March, 1885, the New York and New Jersey Telephone Co. moved into their present commodious quarters at 207 Main street and no expense is spared to make the service as efficient as possible.

During the last two years the long distance service has been developed. Manufacturers and others can now get the benefit of this service at a slight advance in price. Each subscriber to the long distance telephone has two copper wires or a metallic circuit which prevents induc-

tion or other noises from interfering with conversation. Metallic circuit copper wire trunk lines are in use now between Paterson and New York, and it is no uncommon thing to have a Paterson subscriber call for one in Philadelphia, Trenton, Boston, Albany and other distant points.

The officers of the New York and New Jersey Telephone Co. are: Chas. F. Cutler, president; W. D. Sargent, vice president and general manager; Alexander Cameron, treasurer; U. N. Bethell, secretary; John C. Reilly, general superintendent; H. G. McCully, Superintendent N. J. Division; J. F. Noonan, Manager Paterson District.

Electric Light and Gas.

THAT Paterson is one of the best illuminated cities in the country is apparent to any person who either takes a walk through the city or passes by it on the Delaware, Lackawanna & Western railroad, whose tracks are laid on the heights skirting the western portion of the city. The city authorities and private enterprise have been liberal in the supply of illumination, and in many portions of the city it is as bright at midnight as it is at midday. A glance at the establishments which provide the illumination cannot but impress the reader with the fact that Paterson need never suffer for want of light.

THE PATERSON ELECTRIC LIGHT COMPANY.

This company was organized in May, 1888, but was in existence some time previous to that time. Upon the reorganization nearly all the members of the old company remained and associated themselves with a number of practical electricians in the enterprise; among the most prominent of whom were: A. M. Young, of Waterbury, Conn.; W. H. Fuller, of Springfield, Mass., and W. B. Hosmer, of Boston. A portion of the stock, however, was and is still held in Paterson. The new company at once threw out the old plant, the station being equipped with the Arnold-Hochhausen system, and adopted the Thompson-Houston system of arc and incandescent lighting and transmission of power. The power of the old plant was furnished by a 250 horse-power Corliss engine, which was supplied by two boilers of 80 horse-power each. This company furnishes the illumination to both of

the Paterson theatres; it supplies 226 street lights, 130 commercial arc lights, 4000 incandescent lights, and will shortly add to these 800 incandescent lights which are to displace the present street lamps, now burning oil throughout the city. It is now the intention of the company to add to its plant one 200 horse-power boiler to meet the demands for power that will be required by the addition of the city's new lights. It also supplies power to a large number of Perret Motors running ventilating apparatus, coffee and spice mills, ice cream freezers, etc. The first incandescent lights were furnished July 1, 1888, when the city was wired for about 1,000 lights. The old company were supplying 101 arc lights, 68 city street lights and no incandescent lights at the date of the reorganization. The company occupies a substantial brick building on Railroad avenue of two stories, and this is fitted up in the most approved manner with all the latest improved means and appliances known to electrical science as applied to illumination and the transmission of power. The switch-board, especially, is a marvel in its way, and is said to be one of the very finest in the country. The capital of this company is \$300,000. The officers are: Eugene Stevenson, president; John Norwood, vice president; T. Y. Kinne, treasurer; John F. Noonan, secretary; James A. Heagan, manager; E. S. Breed, superintendent.

The company has at present five boilers of one hundred and fifty horse-power each and three of eighty horse-power each, a total of about one thousand horse-power. It has a Corliss engine of two hundred horse-power and eight Ball engines of a hundred horse-power each. It has

ten dynamos for incandescent lighting, each having a capacity of five hundred sixteen candle power lamps; eight dynamos for fifty arc lights by the Thompson-Houston system and one dynamo for incandescent street lighting having a capacity of sixteen hundred lamps of sixteen candle power each.

THE EDISON ELECTRIC ILLUMINATING COMPANY.

This company was organized in the late Summer of 1888, and commenced operations in November of the same year. At the present date the station, which is located in Paterson street, in the handsome building formerly occupied by the Weidmann Silk Dyeing Company as offices and for other purposes, supplies the current to about 5,800 incandescent lamps and about 80 arc lights, the latter being mainly for commercial and manufacturing purposes. At the very outset the plant was laid for 15,000 incandescent lights, involving the laying of about 6 miles of underground tubing and the use of eighteen miles of heavy copper conductors. The present steam plant has a capacity of 600 horse power. The station, together with its equipment throughout, is one of the finest in the State, and has few superiors anywhere. All the dynamo regulators, dynamo switches, equalizers, indicators, etc., are grouped in a spacious gallery at one end of the engine room. The system, which can be readily expanded to keep pace with all the requirements of the growing city and its numerous, rapidly developing suburbs, extends to the far east side, the choicest portion for residence, where it has been introduced into many of the modern homes of prominent manufacturers and others, and also through all the principal business and manufacturing sections.

The immense advantage of electricity as a motive power, as compared to steam, is that it is "always there" twenty-four hours of the day, while many of those, especially the smaller manufacturers, who lease space and power find their power cut off when they desire to work overtime. It is also very inexpensive, taking all things into consideration. Many isolated plants have been sold and installed by this company in outlying mills, including those of Jacob Walder, C. E. Meding, the New York Ribbon Company, Jacob Frisch, P. & I. Bannigan and others. The capital is \$300,000. The direction is in the hands of representative citizens and the management is entrusted to a practical and experienced electrician, Mr. William M. Brock, who is destined, beyond a doubt, to leave his impress on the electrical history of the city of his adoption. The Board of Directors is composed of William T. Ryle, president; William Strange, vice president; Arthur Ryle, treasurer; William M. Brock, secretary and general man-

ager; Boetius Murphy, Jacob Walder and Charles Danforth.

The company has a boiler capacity of six hundred horse power with six engines aggregating eight hundred horse power. It has eight Edison dynamos with a total capacity of sixty-four hundred lamps of sixteen candle power each and two dynamos for arc lighting to supply fifty Sperry lights. This capacity will be increased during the present summer by the addition of one three hundred horse power boiler, one one hundred and eighty horse power engine and two large Edison dynamos. The company at present supplies power to the following establishments:—Machinists' Association, twenty horse power; Cooke Locomotive Works, fifteen horse power; Press Printing and Publishing Company, ten horse power; Call Printing and Publishing Company, seven and a half horse power; the Broomhead mill, one of ten horse power and one of five horse power; Rettger & Allen silk mill, ten horse power; Paterson Reed & Harness company, seven and a half horse power; D. Lindsay, five horse power; Hand & McGuinness, three horse power, Halliwell & DeBaun, two horse power; it also supplies a large number of smaller sizes running ice cream freezers, coffee grinders, meat choppers, fans, church organs, &c.

THE UNITED GAS IMPROVEMENT COMPANY.

Gas was first supplied to consumers by the Paterson Gas Light Company in 1848. In 1880 the People's Gas Light Company began operations. In 1882 the management of both of these concerns was assumed by the United Gas Improvement Company, of Philadelphia, who now furnish the entire gas supply. The United Gas Improvement Company claim to control the newest and best methods of gas making. As they also operate other gas works in many cities and towns throughout the country, they have been able to bring to their business in Paterson the best results in their line of modern theory and practice. The works are kept up to the best standards and careful attention given to meeting the needs of consumers. The satisfactory service rendered has resulted in increased business, although the introduction of the electric light has caused a brisk competition in public and private lighting. In addition to its use for illumination, gas is largely consumed in Paterson for domestic cooking and heating, gas stoves being sold by the company at cost or rented by the month. It is also used by many of the mills in their silk finishing processes, by the locomotive works for heating tires, by laundrymen and tailors for heating irons and, in various ways, for other purposes. The gas works management is a liberal one and aims to so serve old patrons and welcome new ones that its operations may tend to the growth and development of the city.

Real Estate.



the object of this publication is the advertisement of Paterson as a place for manufacturing and residence it would be no more than proper that something be said indicating to persons desiring to locate to what sources application may be made for real estate in this city.

THE SOCIETY'S LAND COMPANY.

The Society's Land Company was incorporated in 1887 for the purpose of holding, improving and selling the lands belonging to the estate of the late Roswell L. Colt. The Society for Establishing Useful Manufactures at one time owned nearly all the land lying in the corporate limits of the city of Paterson; from this source Mr. Colt obtained large tracts of property and the Society's Land Company to-day owns real estate in every ward of Paterson, with one exception. It has property suitable for manufacturing as well as for residence and it offers this property at a moderate price and on easy terms. The title to all its property is perfect, dating back to the last century. The officers of the company are the following: Ex-Governor Joseph D. Belle, president; William Pennington, treasurer; Richard Rossiter, secretary; Morgan G. Colt and DeGrasse B. Fowler, directors.

THE COLT LAND COMPANY.

The Colt Land Company was organized for the purpose of developing Colt's Hill, a valuable tract of real estate lying in the centre of the city, which on account of its bulk had not attracted investors before, the owners objecting to disposing of it in parcels. The existence of this unimproved property has been a hindrance to the extension of business towards the upper part of Main street; now that it has been thrown into the market and portions already sold for business purposes its value will continually enhance. The Main street front of the property will be devoted to business houses; the easterly side of the property is most desirable for residences. The company was incorporated in May, 1886. The following are the officers:—President, John R. Lee; vice-president, Peter Quickenbush; treasurer, James Jackson; counsel, John R. Beam; manager, James Crooks; secretary, Richard Rossiter; board of directors:—John R. Lee, Peter Quickenbush, John R. Beam, James Jackson, James C. Hinchliffe, Sam-

uel Nathan, C. E. MacChesney, Alfred A. Van Hovenberg, James Crooks, George W. Pollitt, Henry Cowan, Christian Menzel, Alfred Healy, Jacob Walder, Robert J. Hopper.

THE CEDAR CLIFF LAND COMPANY.

The Cedar Cliff Land Company owns a large tract of real estate lying in Manchester township on the northern boundary of the city of Paterson. For a distance of several thousand feet north of the boundary line the ground here is level; this level plain at one time was used for cricket and other ball games but the march of improvement found better use for it. At the present day the plain is divided into blocks with regularly laid out and graded streets and avenues. Through the property runs the Oldham brook, furnishing a never failing supply of water. Several mills and a considerable number of residences have already been erected and the property is in constant and active demand. At the northern line of the plain the property rises into the Preakness hills and presents some of the most beautiful scenery in the State. A number of years ago it was laid out into villa sites and roads were constructed through every portion of the property. A fine view of the city of Paterson can be obtained from almost any point on this part of the property. The ground is well shaded by stately trees and springs of the purest water abound. No lovelier site could be selected for a residence. The officers of the company are:—Robert Barbour, president; F. C. Van Dyk, vice-president; Garret A. Hobart, treasurer; James A. Morrissey, secretary and agent.

THE CHESTNUT HILL LAND COMPANY.

The Chestnut Hill Land Company owns most of the real estate bounded by the Passaic river, East Thirty-third street and Broadway, a section of the city which is not surpassed by any in beauty of scenery and advantage of location. So attractive is the property that a committee of citizens appointed at a public meeting held a number of years ago unanimously recommended the purchase of the property for a public park. Other counsels, however, prevailed and the city purchased the property lying on the opposite side of Broadway, thus materially enhancing the value of the Chestnut Hill property for residences. Broadway is the finest residence street in the city and that part of the Chestnut Hill Land Company's property fronting on

Broadway will in the near future be occupied by stately residences. To the north of Broadway the land slopes gently to the river, presenting a succession of beautiful lawns and groves. Fine river and woodland scenery and views reaching many miles may be enjoyed from almost any point on this property. Of late years the more costly residences have been attracted to this section of the city; the property of the company accordingly offers every advantage for an investment, as the river forms the natural boundary of the city. The officers of the company are:—W. R. Brown, president; Garret A. Hobart and John W. Griggs, counsel; R. M. Eklings, agent.

GLENWOOD.

The magnificent scenery surrounding Paterson has attracted thither a large number of residents, most of whom remain all the year, only a few seeking a metropolitan home during the cold weather. The demand for houses in the suburbs has always exceeded the supply and not a year passes but a large number of country homes are erected. Taking advantage of this fact Mr. Thomas M. Ryle with admirable and characteristic judgment some time ago purchased forty-two acres lying along the banks of the Passaic river, a short distance below the magnificent Little Falls of the Passaic. The location of the ground—portions of which are shown in illustrations on another page—was admirably adapted for summer residences. Mr. Ryle at once laid out a number of drives and soon had the grounds in a condition that left nothing to be desired. A music hall was erected and grounds laid out for tennis courts, quoiting and other outdoor sports; the half mile frontage on the Passaic provide ample opportunity for boating and angling. Mr. Ryle has erected a number of cottages and these were rented long before they were completed. Mr. Ryle's intention was to provide a certain number of cottages, feeling confident that their attractiveness would ensure tenants; he did not have to wait until the cottages were completed and he was compelled to change his plans and erect cottages for those who were ready to move into them. Cottages are consequently erected to order. All modern conveniences, gas and water included, are to be found at Glenwood or Ryle Park, a prettier place than which cannot be found in Passaic County.

THE DOREMUS FARM.

The old Doremus farm, lying on Totowa, in the Second Ward of Paterson, a few minutes' walk from the Passaic Falls, and within six or eight minutes' walk of the West street bridge across the river, comprises a tract of between sixteen and seventeen acres, lying on a gentle slope affording the best drainage into the Oldham brook, while it is so near to the main sewer in Union avenue that the property can be readily drained in that direction also, as soon as it is sufficiently built up to require sewers. The tract extends from Red Woods avenue on the west to Marion street on the east, and from near Crosby avenue on the south to the Oldham brook on the north. It is intersected

by Crosby avenue and Doremus street, running east and west, and by Jasper and Kearny streets running north and south. The highest ground is not more than three or four feet above the established grades of the streets, while the lowest is but a foot or two below grade. Consequently, purchasers of lots on the tract have the assurance that they will not be injured by the grading of the streets. In fact, the lots fronting on Jasper, Kearny and Doremus streets, as well as those on Red Woods avenue and Marion street, with a few exceptions are substantially at grade now. One fact of great importance regards the title of this property. Workingmen do not care to expend large sums in the making of searches into the title of the lots they buy. In the case of this land there is the satisfaction of knowing that it has been in the possession of the Doremus family for nearly sixty years, being one of the oldest farms in the county. The members and representatives of the Doremus family organized The Doremus Land Improvement Company on January 15, 1890, and conveyed the property to the new corporation, which immediately took steps to put the land on the market. The success that followed this move has been one of the most remarkable phenomena in Paterson real estate enterprises. Within six months upwards of one hundred lots had been sold, or about one-half of the entire tract. In the place of an old thirty-foot lane the company laid out Doremus street, fifty feet wide, 325 feet north of Crosby avenue, which they intend to grade during the summer of 1890. Nearly every lot south of Doremus street has been sold. Some of the most desirable lots are still unsold, lying north of Doremus street. The land is so desirable for residences that the company early adopted the policy of insisting upon three restrictions with all purchasers of lots: First, to prevent the obstruction of sidewalks by front stoops, and to give the streets a broader appearance, which would also allow of the growth of shade trees, it was decided to require all buildings to be set back six feet from the street line. Second, it is required that no nuisances of any kind shall be erected or maintained on the property sold. Third, it is provided that the land sold shall not be used for the sale or manufacture of intoxicating liquors. All three of these restrictions have proved exceedingly popular with buyers, who thereby are assured that their property will not be impaired in value by objectionable trades or business, and that they virtually secure a street sixty-two feet wide instead of fifty. In view of the difficulty and expense often attending the making of searches of titles, the company has caused a most exhaustive search to be made, tracing the title to this tract from King Charles II., of England, in 1664 down to the date of the conveyance to The Doremus Land Improvement Company in 1890. This search was prepared by William Nelson, whose familiarity with ancient land titles is beyond dispute, and it has been verified by Jacob H. Blauvelt, the most experienced searcher of titles in Paterson, and by the County Clerk. The company has had this search printed, and furnishes a copy to every purchaser of a lot on the tract. This is the first instance in Paterson

where this has been done. Lots are sold on the easiest possible terms. Upon the payment of ten dollars per lot the company executes a contract of sale, permitting the purchaser to pay the balance in instalments of from five to ten dollars and upwards per month; when one-third is paid, the purchaser may take a deed and give a mortgage for the purchase money. No advantage is taken where a man gets out of work, or falls ill, or from other cause is unable to meet his payments promptly. So long as the interest is kept up the company is satisfied to allow a man the most ample time to pay the principal. In every way the company seeks to promote the kindest feeling between itself and its purchasers and the result has been most happy. The prices of lots range from \$125 to \$300, so that everybody can be suited. Most of the lots are held at \$200 each. Corner lots are \$300, and lots next to the corner \$250 each. The officers of the company are: President, Frank D. Vreeland, M. D., 61 Bridge street; Secretary and Treasurer, William Nelson, 174 Market street, Paterson.

JACOB V. ACKERMAN is one of the best known citizens of Paterson. He was born in the Fourth Ward of Paterson on February 5, 1830, and he not only liked Paterson so well that he has ever since lived in it, but he has remained true to the Fourth Ward, never having taken up his residence outside of its limits. His education was obtained at private schools and early in his life he was employed in his father's shoe store on Main street, near Broadway. At twenty years of age he went into partnership with his brother under the firm name of Ackerman Brothers in the shoe business at No. 120 Market street; the firm for a long time had the monopoly of the finest grades of gentlemen's footwear which, in order to ensure quality and durability, they manufactured themselves. The first English blockade runner, the "Peterhoff," captured by the Union forces, was laden with fine shoes and boots; Mr. Ackerman sold one-third of its cargo having acquired it by purchase from a Jersey City firm. Mr. Ackerman subsequently established the shoe business for himself in Main street and there did a successful business until in 1875 when he went into the business of real estate and money broker and fire insurance agent. The success which attended him in mercantile life followed him in the new vocation and he soon rose to the first rank among the men engaged in the business he had selected for himself. He has in his hands a great deal of valuable real estate in all parts of the city; his genial disposition makes him a pleasant man to deal with and his character for honesty and fair dealing attract to his office capitalists who desire to invest funds without having the time to closely scrutinize the character of the investment.

JAMES CROOKS was born in Bury, Lancashire, England, April 11th, 1830. He came to this country in June, 1851, and settled in Paterson in the following year. He served an apprenticeship in the Rogers' Locomotive Works, but in 1861 started in the real estate business to which he has

since devoted his attention. He located at Totowa, and was the first to develop that section of the city. He was always a firm believer in wide streets, and it was due to his influence and work in 1866 that Market street, Broadway and a number of other thoroughfares were changed from narrow country roads to pleasant, wide streets. For five years at an expense of \$10,000 he ran the first free library and reading room in Paterson. He purchased from Mr. Thomas D. Hoxsey the charter of the Cedar Cliff Cemetery Company, and after securing an amendment thereto by the Legislature founded the Cedar Lawn Cemetery Company. He secured the charter for the Paterson & Passaic Horse Railroad Company, and built and ran the same at a great loss for many years. Subsequently he devoted his attention to developing other portions of the city, and was especially instrumental in the development of the southern section of the city. In April, 1866, he formed the Colt Land Company, thereby throwing open to improvement a valuable plot in the centre of the city, and hopes to live long enough to see a Central Park for the coming great city of Paterson and Passaic united.

COL. R. M. EKINGS, the subject of this sketch, who is the senior member of R. M. Ekings & Company, is of Scotch parentage, and was born near the City of Edinburgh, Scotland, in the year 1830. About the year 1849 the family came to the United States. At the breaking out of the war Mr. Ekings had just completed his education and at the nation's call for help he with two brothers enlisted in the service. He was enrolled as private in Company I, Twenty-third N. J. Vol. Infantry, and remained in the service nearly four years; part of the time he was attached to the First New Jersey Brigade and subsequently to the armies of the west and southwest, with which during that time he took an active part in many of the great engagements that have made those armies famous in history. For valiant and faithful service in the field he was promoted from the ranks, through the grades of Lieutenant, Captain, Major and Lieut. Colonel. During the winter of 1863 and the spring of 1864, Col. Ekings was in command of the Post of Island No. 10, on the Mississippi river, and during most of the last year of his service he was on the staff of Major-General Kenner Gerrard, first as Inspector-General of the First Division, Sixteenth Army Corps, and afterward as the Provost Marshal of the southern district of Alabama. Of the three brothers who entered the service of their country the subject of this sketch was the sole survivor. One of the brothers was an officer in the third New Jersey Infantry; the other was attached to a Pennsylvania Regiment.

After the close of the war Col. Ekings settled in Paterson, engaging in mercantile pursuits until 1875, when he began operations in real estate and insurance, and since that time has been identified with many of the largest and most important transactions in real estate in this vicinity. The firm composed of Col. Ekings and Stephen A. Wall are engaged in the general real estate and insurance business and are known and recognized throughout this city.

and vicinity as one of the most progressive and responsible firms in the business. They represent as agents the Aetna, Hartford and Phoenix of Hartford, the Sun of England, Fire Association of Philadelphia and Phoenix of Brooklyn, all old and reliable fire insurance companies; their offices are at No. 202 Market street.

SIDNEY FARRAR was born on October 20, 1832, in the parish of Elland, Yorkshire, England, and at ten years of age accompanied his parents to this country. The family at once settled in Paterson, which Mr. Farrar has since made his home. After a common school education Mr. Farrar went to work in the locomotive shops where he became a skilled machinist and engineer. He worked at this for twenty-one years, frequently filling positions of trust and responsibility. During the war he was in the service of the Union nearly two years at Hilton Head, South Carolina, under General Gillmor, being the chief engineer in the Quartermaster's department, a position similar to that of master mechanic. As engineer and machinist he had occasion to travel a great deal in this country and the benefits of travel were not thrown away on him. He was always of a quiet and studious disposition and added to the education of his boyhood days a valuable fund of information by special studies and extensive reading which have proved of great service to him in his present business. In 1870 he went into the business of real estate and fire insurance agent; he was subsequently appointed a notary public and commissioner of deeds and elected a justice of the peace. For ten years he was president of the Paterson Mutual Building and Loan Association and has since been secretary of both this company and the Union Mutual. Mr. Farrar has always been a Republican in politics and has served his party as a member of the Board of Education and also of the Board of Aldermen, of which latter body he was president for one term.

REV. G. W. I. LANDAU was born on December 27, 1846, in Krakau, Galicia. His mother died when he was hardly a year old and he spent the early years of his childhood with his grandparents. At ten years of age his father, who had remarried, took him to Hungary, and in Pesth, the capital of that country, he began his education. His ancestors had been prominent in the preservation of the Hebrew faith; his father was a teacher of the Talmud, and it was but natural that the principles of the Jewish faith were early instilled into the young man. While he was pursuing his studies in Pesth his mind became impressed by the reformation of orthodox rites at that time in progress under the leadership of the renowned Rev. Dr. Meisel. Conviction succeeded doubt and when he subsequently returned to Galicia to live with a wealthy aunt, he devoted himself to the acquirement of such knowledge as would give him a standing in any community irrespective of his religious convictions. He entered a medical college where he remained two years, after which he removed to Vienna, where he completed his medical studies. Here he met a schoolmate, who had been converted from Judaism, and from him obtained an insight into the principles

of Christianity. He then went to Berlin, where he continued his investigations into the various doctrines of theology and after a long struggle he concluded to abandon the Jewish faith and become a Christian. The disfavor with which this determination was received by his people may be well imagined. Disowned, disinherited and persecuted, he fled his native country and proceeded to London. On the 7th of August, 1870, he was baptized in the Episcopal chapel at Bethuel Green and for some months afterwards was a devoted student of theology. With the enthusiasm characteristic of a neophyte he concluded to return to his own country and study for the ministry. Many were the tribulations which he found in his path but these only strengthened his determination. Finding himself wholly without means he saw himself compelled to accept a position as clerk in a bookstore at a salary of ten dollars a month. In May, 1871, he went to Hamburg with the intention of coming to this country where he resolved to continue his theological studies. On June 4, 1871, he arrived in New York, with but one dollar in his possession. He found few roses in his path but his determination raised him above all difficulties. He became acquainted with the Rev. Dr. G. C. Seibert, Professor of Theology at Bloomfield, N. J., and through his influence he entered the theological seminary and in 1874 graduated with honor. In the summer of that year he received a call from the German Reformed churches at Bergen Point and Jersey City which he accepted and at which places he did a great deal of missionary work. In September he was duly ordained a minister of the gospel. His position was anything but an enviable one; his salary was only \$25 per month. In addition to the hardships which he was compelled necessarily to endure he found that his hard study and strenuous exertions in the new fields of labor could not be stood any length of time without undermining his health and he was compelled to seek a place where his duties were less arduous. He accepted a call from the German Presbyterian church of Jeffersonville, Sullivan county, N. Y. Here he was married to the daughter of one of the trustees of the church. He subsequently accepted calls to churches in Washington, D. C., and Paterson, N. J., and spent fourteen years in preaching the gospel. Too arduous attention to the duties imposed on him began to show their effects on his health and he suffered with nervous prostration and troubles with his eyes. At the advice of physicians he resigned his pastoral duties in May, 1885, and purchased a drug store. His work here gave him little amelioration from his physical ailments; the long hours of confinement began to tell seriously on his constitution and he was compelled to give up the business. In the meantime he had made a number of profitable investments in real estate. Having found his judgment excellent in such matters he concluded to devote himself exclusively to that line of business. He has been very successful and has succeeded not only in accumulating a competency but also in often extending a helping hand to others who stood in need of his assistance and advice.

JAMES A. MORRISSE was born in Ireland on August 26, 1811. He came to this country in February, 1803, and after spending some time in the west settled in Paterson in 1806; he started in the real estate business in 1808. He has sold many million dollars worth of real estate in the past twenty-two years and has laid out and developed large tracts of ground, among the latter being the property of the Mutual Life Insurance Company located on Park avenue, formerly known as the Christie tract. It contained over a hundred city lots, all of which were sold through Mr. Morrisse, and a hundred houses have been erected on the property. He also developed the property known as the Hopper and Clapp tracts, one situated on the southwest corner of Park avenue and East Eighteenth street and the other on the southeast corner. He subsequently organized the Cedar Cliff Land Company, a sketch of which appears on another page; he sold over three hundred lots on this tract and located two silk mills and a number of residences. He organized the Broadway Land and Building Company and purchased for it 128 lots of ground located on Broadway, East Twenty-sixth and contiguous streets. Within the past two years he has organized the Citizens', Hamilton and the Home Land Companies, whose properties are located at South Paterson between Madison and Buffalo avenues, the Erie railroad and Trenton avenue. These three companies own about seven hundred lots. He also organized the Eastside Land and Building Company, of which he is president. His connection with the organization of the Laurel Grove Cemetery Company is told in the sketch of that company which appears on another page. In 1883 he organized the Iron and Silk Building and Loan Association. He was elected president of the company and has continued to hold that office ever since. This is considered one of the most conservative and successful building and loan associations in the city. Although Mr. Morrisse's business has been mostly real estate he has also done a large insurance business. As agent he has charge of the properties of the Equitable Life Assurance Society of the United States and of the Mutual Life Insurance Company of New York and represents over a hundred owners of real estate for whom he collects rents. Between eleven and twelve hundred tenants pay rent to him as agent. He is also agent for all the English steamship lines and the French line. He also does a large business in procuring loans, having negotiated several million dollars of loans for his clients. He will during the latter part of this year erect a very handsome four story and basement granite and brick office building to be situated on the northwest corner of Main and Ward streets. When finished it will be one of the finest office buildings in the city.

SAMUEL S. SHERWOOD was born in New York city. His ancestors were among the earliest settlers of this continent, one of them dying in 1655 near where Fairfield, Conn., now stands. After having served as cashier in a dry goods house in New York, Mr. Sherwood when he became of age formed a partnership with Alexander Doug-


las under the firm name of Douglas & Sherwood and carried on the retail dry goods business for four years. During this time Mr. Sherwood started the manufacture of hoop skirts, being the first to engage in that business in this country. Having sold out the retail dry goods business he began the manufacture of hoop skirts on a large scale, having for a special partner Nathaniel Wheeler, the president of the Wheeler & Wilson sewing machine company. The firm was doing an enormous business at the time of the breaking out of the rebellion, but unfortunately had given long credits to a number of houses in the South. The firm, however, extended its business by the manufacture of hospital goods for the government, ladies' collars, cuffs, &c. They were the first to do a large wholesale business north of A. T. Stewart's store in Chambers street, occupying No. 343 Broadway, opposite the old Broadway Tabernacle and the Society Library Building. The firm subsequently occupied the large building Nos. 51 and 53 White street, being the first to carry the wholesale business west of Broadway; the firm subsequently occupied at the same time the large building at Nos. 9 and 11 White street, near West Broadway, which was built for them by the late Daniel Kingsland. In 1864 Mr. Sherwood retired from business in New York and started into the real estate and insurance business in Paterson, to which place he had removed four years previous. Mr. Sherwood was the first to move in the laying out of the East Side of Paterson. He mentioned the matter one day when he had accidentally met Mr. Jacob S. Rogers in New York; Mr. Rogers urged Mr. Sherwood to take charge of the matter, having become convinced that Mr. Sherwood's ideas were the best; on the train going to Paterson they met Mr. William G. Watson, at that time Mayor of the city; Mr. Watson added his entreaties to the request of Mr. Rogers and Mr. Sherwood agreed to undertake the difficult task. The petition was presented at the next meeting of the Board of Aldermen and granted. Mr. Sherwood has since been closely identified with the progress of Paterson. He was one of the incorporators of the Paterson & Passaic horse railroad company; he was a member of the first board of directors and for some time secretary; he is at present a member of the board of directors of the Paterson City Railway Company, which some time ago absorbed all the horse car lines in the city. Mr. Sherwood was the first to take energetic steps towards compelling the Dundee Water Power and Land Company to open its dam for the navigation of the Passaic and is at present treasurer of the fund subscribed for that purpose. He was a member of the Board of Aldermen from 1875 to 1877; he was chairman of the committee on finance for the whole of his term and for three years he was the unanimous choice of the Board for president, an office he filled to the satisfaction of all. He was one of the commissioners on the Broadway and Willis street sewer, the first commission created under the new law, and since that time has been on fifty-two similar commissions. For a number of years he was Commissioner of Appeals in cases of taxation but

his ever increasing business compelled him to relinquish public office. Since that time he has devoted his time to real estate, having charge of a great many valuable tracts and estates. He is the treasurer of the Paterson General Hospital Association and chairman of the Board of Arbitrators appointed by the trades unions and the Board of Trade.

P. D. WESTERVELT. Energy and untiring devotion to business have made P. D. Westervelt the successful business man he is to-day. No college or university education gave him the lead above his companions, but the common school and the common rural life of a well-ordered and self-respecting farming community made him what he is by nature and by education. Mr. Westervelt was to the manor born. He is a native of this county in which he has labored so faithfully. He was born at Hawthorne, in the township of Manchester, December 21, 1849. The house in which he was born he now occupies, and it is situated in one of the most beautiful spots along the banks of the Passaic. From its front piazzas a splendid view of the city of Paterson and the surrounding country may be obtained. The grounds around the house are extensive and are studded with all varieties of vegetable life. Altogether, Mr. Westervelt's home is one of the most delightful spots in the county. Young Westervelt's early life was mainly passed on his father's, the late James P. Westervelt's, farm, and at the school house. At school his perseverance always kept him among the best students of his class, but like the majority of American youth, his schooling terminated while he was yet a boy. Immedi-

ately on leaving school he made up his mind to secure a situation at Paterson. After some delay he got a place in the lumber office of the late Thomas Beveridge. Here his industry was soon recognized and his career as office boy was but a very short one. Positions of more importance requiring greater skill and labor were given him and in these he gave his employer the utmost satisfaction. After remaining at the lumber office for about seven or eight years and acquiring a thorough business education, Mr. Westervelt decided to embark in business for himself. At the lumber yard office he had learned considerable about the coal business so he concluded that his first venture should be in this line of trade. His experience in this business was brief and in a short time Mr. Westervelt had given it up and established a general collection office. In this business his industry came to his aid and he soon built up a successful trade. He was then made collector for several of the largest mercantile houses in Paterson and Passaic. In 1888 Mr. Westervelt decided to engage in the real estate and insurance business. In this he has found a most suitable occupation and his success has been most flattering. He is an excellent judge of the value of land and persons confiding their business interests to his care have found him not only an honest but a discreet business man; through him some of the largest real estate transfers on record in this county have been made. His great activity has also favored him in the insurance business and he is the representative of some of the best companies in this country. Mr. Westervelt is always to be found busy at work in his cosy office at 114 Ellison street.

Business Houses, &c.

 It is the object of this publication to place before the country the many advantages which Paterson possesses as a place for manufacturing and residence it is obvious that little need be said about the business houses. The fact that Paterson has a cosmopolitan population numbering over seventy-eight thousand is enough to satisfy any person that there are many prospering business houses here. A glance, however, at a few firms, who are distinguished for superior energy and other qualifications which go to make up the successful merchant, will be of interest.

JAMES ENGLIS, JR.—One of the most prominent and successful business men in Paterson is Mr. James Inglis,

Jr. He is a native of Paterson, his father having removed hither from Sussex County, N. J., about sixty years ago. He obtained the best education afforded by the schools of Paterson, at ten years of age being compelled to walk from his home in the city to the school house which stood at that time near the Wesel bridge. After having left school he became a clerk in a grocery kept by John O'Brien at the triangle formed by the intersection of Market, Willis and Straight streets. Here he remained until Mr. O'Brien sold out when he went to Passaic where he was employed in the grocery kept by William L. Andruss. After remaining there for one year he returned to Paterson and was employed in a drug store kept by his uncle,

the late Charles Inglis. After spending a twelvemonth in the drug store he went to New York where he worked at piano-making in Amity street. Returning to Paterson he learned the trade of patternmaking in William Swinburne's locomotive and machine works and subsequently spent a year in Kingston, Canada, working at his trade in the locomotive works which were then being established in that place. Returning to New Jersey he entered the employ of Robert Rennie, at Lodi, in Bergen county, where he was employed a year at setting up machinery, engines, &c. He next went west, establishing himself at Racine, Wis., and for some time operated a saw mill in the woods near that place. Growing tired of this life he returned to the east and for some time worked as a patternmaker in the foundry at West Point. Here he remained until the hard times of 1857-8 when he returned to Paterson and in the following year began the mercantile career which has placed him high among the successful business men of this city. It was in October, 1858, that he bought out Solomon Danforth's interest in the music and stationery store of Field & Danforth, which had been established for some years at No. 167 Main street. In 1862, when President Lincoln had issued his call for three hundred thousand men, Mr. Inglis used his utmost endeavors to secure volunteers in this city and succeeded in getting together three companies with which he marched to the front, serving until the expiration of the term for which he had enlisted. Returning to Paterson he continued his business and in addition thereto started the National Mills Company; his interest in the latter he sold out in 1872 to A. Hubbard & Co. In the following year he bought out his partner in the music and stationery business and shortly afterwards removed to No. 172 Main street. Here he remained in the successful prosecution of his business for twelve years when he erected for himself one of the handsomest structures in the city, located on Main street, near Ellison. Here he continues to conduct the business founded on so many years of integrity and fair dealing; his spacious store contains a large assortment of everything in the line of stationery, books, paper, blank books, &c.

In politics Mr. Inglis has always been an unswerving Democrat, ready at all times to assist his party. For a number of years he was a member of the state committee and took an active part in the campaigns in the state as well as the county. Disliking everything that smacked of chicanery or trickery the name of Inglis became a synonym for everything that was energetic and straightforward in politics. In 1883 he was appointed by Governor Ludlow a judge of the courts of Passaic County; he was re-appointed in 1888 by Governor Green. In this appointment the executive of the state has happily blended the reward of political services with the appreciation of sterling qualities which have made Judge Inglis one of the most respected as well as one of the most popular men of Passaic county. In business and in politics Mr. Inglis was always openhearted and kind, without swerving the

least from the path which duty marked out; the same qualifications which led to success as a leader among politicians and merchants made him a Judge who is respected by all—ever merciful to the frailties of human nature but fearless in the suppression of vice and just in the punishment of crime.

FRANCIS KNOX MCCULLY was born in Paterson, N. J., on November 24, 1837. After receiving an education in the public and afterwards in the private schools of the city he accepted a position as clerk with J. & G. Ramsey and subsequently acted in a similar capacity in Blundell's Express Company's office. He left the latter place for the purpose of accepting a clerkship in the Bank of Jersey City. While thus employed one of the directors, who had been attracted by the pleasant manners and business ability of the young man, induced him to accept the position of cashier of a leading stock, gold and foreign exchange banking house in New York city. After having served three years in this capacity he bought a seat in the Open Board of Brokers, an organization which has since consolidated with the New York Stock Exchange. Failing health compelled him to give up the brokerage business and at the suggestion of a number of gentlemen with whom he had been associated in business he accepted the position of secretary of the Flint Steel River Mining Company and eventually became secretary of four other mining companies. As his health did not improve he was compelled to resign these lucrative positions and he remained idle for six months. Hoping that a more active life would improve his health he opened a fine grocery business and for seven years was successful beyond expectation. But his natural love for financial business never left him and on April 1st, 1874, he sold out his grocery business and opened an office as banker and broker in his native city; he has continued in that business ever since. To-day he stands before the community as a man who by his business and private life has proven that a man may rise to eminence in his own city. As an executor and trustee under a number of wills he has given abundant proof that he is especially qualified to discharge such duties; at the present writing he represents ten estates as trustee. His facilities for obtaining information make him the standard authority on all matters pertaining to financial affairs. His son, Frederick W., is a young man of exceptionally fine ability and renders most valuable aid in the management of his father's business. Mr. McCully's elegantly fitted up banking offices, second to none in the State, are located at No. 121 Washington street.

PETER QUACKENBUSH, one of the most public spirited citizens of Paterson, was born in Paterson on February 24, 1814. He received his education in the public schools of the city and in Professor Allen's Seminary. In 1836 he began work as a clerk in a dry goods store and until 1878 continued uninterruptedly in the employ of the same firm. With the savings of eighteen years of work and fortified with a business experience obtained in actual practice Mr. Quackenbush in 1878 started in business for him-

self at No. 180 Main street. In 1882 he formed a partnership with Mr. John B. Mason under the firm name of Quackenbush & Co., and the firm soon found it necessary to increase the accommodations for a business which was continually multiplying; this was done by taking possession of the adjoining store, No. 182 Main street, the two stores being thrown into one. Even with this large floor space the firm did not have room enough and having added a general line of all kinds of dry goods to their already extensive stock, another addition was looked for. For some time this seemed difficult as all the space on Main street had been taken by other business houses; the firm solved the difficulty by obtaining possession of the property in the rear of their two stores and by extending the additional room thus acquired through to Ellison street. Their store accordingly is in the shape of a gigantic letter L. The public appreciation of the excellent manner in which the business was managed showed itself in largely increased sales and the firm attained a standing in the commercial world which could not have been acquired except by the exercise of the best judgment and the liberal patronage of the public. For two years Mr. Quackenbush served in the Board of Education but his business engagements were such that he was compelled to relinquish all idea of political preferment which was frequently offered him. He, however, did not deprive the public of his valuable advice and assistance and no movement calculated to benefit the public was started but what Mr. Quackenbush lent a helping hand, assisting the project with advice, influence and purse. He was foremost in the movement which secured for Paterson two magnificent parks. He is a director of the Second National Bank, the Colt Land Company and the Paterson Sanitary Company and has on a number of occasions been called upon to act in a fiduciary capacity where considerable interests were involved.

JOSEPH TOWELL was born in County Down, Ireland, on May 24, 1848, and attended the schools of his native place until he was fourteen years of age. Even at that early age he evinced a liking for flowers and floriculture and at his own request he studied gardening in the gardens of the Marquis of Downshire for three years; during his apprenticeship he received no wages but paid the sum of eighteen pence per week for the education he received there. At the expiration of the three years he went to England where for twelve months he had charge of the gardens at East Hempstead Park. Finding that there was still something to learn in the vocation he had chosen he sought employment in the large gardens of the British Isles, his main object being the acquiring of a thorough knowledge of gardening, wages being only of secondary consideration. In pursuance of this plan he was engaged in a large number of the principal gardens of England both private and commercial and fitted himself thoroughly for the business. He had from his early youth a desire to come to this country and in 1872 he carried that project into execution. Despite the prevailing depression in all lines of business he soon found employment as landscape

gardener and after spending some years in New York, Newport, Rhode Island, Long Island, Astoria, Staten Island and Canada, he came to Paterson in 1878. The late Judge Woodruff at that time owned the Bellevue nursery, situated on Haledon avenue; the ground was admirably adapted for floriculture but there were only seven hothouses, six of which were very small. For some time Mr. Towell managed the place under a lease he had obtained from Mr. Woodruff; the latter frequently expressed his gratification at having induced Mr. Towell to locate in Paterson, for Judge Woodruff was very fond of flowers and recognized that in Mr. Towell he had found the man who would establish a nursery in Paterson that would come up to the expectations of the most sanguine and enthusiastic lover of the floral kingdom. In 1880 Mr. Towell acquired the nursery property by purchase and since that time his career has been one of continued success. He soon found the facilities far too small for there was an enormous demand for the product of his hothouses and he enlarged from year to year until he had one of the finest establishments in the country. At no time was the supply equal to the demand and Mr. Towell never regretted one minute of the many days he had spent in acquiring a thorough knowledge of his business. He recognized to its fullest extent the proverb which declares that there is always room at the top. He soon established a large trade with New York and other cities and his business is ever on the increase. Consequently improvements are continually going on at the Bellevue nurseries. Mr. Towell has erected for himself a handsome residence and at present, although he has thirteen hothouses, he is building five more; these additions will be each one hundred by eighteen feet, built of iron and glass according to the latest and most approved patterns. When these are completed Mr. Towell will own the finest establishment in New Jersey and one the superior of which cannot be found in the United States. It would be impossible for a man of the energy, knowledge and talents possessed by Mr. Towell to live in any community without making his influence felt and Mr. Towell has become not only an authority in everything pertaining to his particular business but he has also become one of the foremost and most respected citizens of Paterson.

THE JOHN NORWOOD COMPANY.—Among the most important of the large business establishments in the city of Paterson, that exert in no small degree an influence upon the commercial advantages of that city, is the wholesale and retail paint and painters' supply house of the John Norwood Company, which is located on the southwest corner of Main and Ellison streets. The building, which is one of the finest and largest in the city, is constructed of pressed brick, with ornamental stone dressings, and has a frontage of twenty-five feet, with a depth of one hundred and ten feet; it is three stories in height. It is one of the most conspicuous features of Main street, the leading thoroughfare of the city, and is amply provided with every convenience and facility for conducting the large trade

that is carried on, which is both wholesale and retail, the store being divided into two departments, in order to facilitate transactions. The company also occupies a building in the rear of their premises in Ellison street; this building is fifty by fifty feet and three stories high. The stock, which for character, extent and variety is the largest in the city, comprises paints, varnishes, glass, white lead, oils, alcohol, glues, gums, &c., and a very large and complete line of brushes; also artists' and wax flower materials, machinery and burning oils are handled largely. A full line consisting of fifty shades of the Longman & Martinez and The John Norwood Co.'s ready mixed paint is always kept in stock. It might be stated that the demand for ready mixed paints is growing every year, and the foreman of the company says that white lead, colors and oil ground together by machinery, are finer and will wear much better than if mixed by hand. There is also a well selected stock of coach colors and coach varnishes, and other materials used by carriage builders. Carriage gloss paint is a comparatively new article; it is coach colors ground in varnish and ready for use. The wall paper department is as large, if not larger than any other; great care and study is given to the selection. The patterns and colorings are always the newest. They carry in stock pressed papers, velvets, embossts, bronzes, felts, silks, damasks, varnished, washable and sanitary papers; also white and brown blanks; most of these have matched friezes, borders, ceilings and decorations; a complete combination can be made including mouldings, &c. Shadings and hollands, plain and decorated, with many styles of fringes, which match in color; also all sizes of spring rollers and fixtures for large store windows, &c., will be found in this department. The company give special attention to shading fine residences, large mills, &c., as they make all the shades they sell. The painting and interior decorating is in the charge of a foreman who is a practical and thorough man, and devotes all his time to this branch, and all work entrusted to his judgment, will be correct in combination, coloring, &c. Another feature worthy of mention is the systematic arrangement prevailing throughout the entire establishment.

The business was established by Mr. John D. Shorroek in 1830; Mr. Shorroek was succeeded by John Norwood & Co., and at present the business is carried on by the John Norwood Company, a corporation which for ability in the qualifications of its personnel is not surpassed by any in the city. All of the members of the company have had a great deal of experience in their particular departments of the business, and all were for a number of years connected in some capacity with the firm of John Norwood & Co. Mr. W. G. Norwood is the son of John Norwood and assisted him for many years in the general conduct of the business. Mr. John B. Spear was for ten years bookkeeper in the establishment and is thoroughly conversant with every branch of the business; Mr. Henry Schoonmaker who has charge of the shade department, has devoted many years to that branch of the business;

Mr. John H. Post has shown exceptional ability in the department entrusted to him; Mr. James Kennelly is a practical painter and decorator; Mr. George W. Pollitt was for many years engaged in mercantile pursuits in the city until he became an employee of John Norwood & Co. That success should attend such a combination of practical men, each especially adapted to the department entrusted to him, is certainly not more than might have been expected.

MARSHALL & BALL.—The name of this firm is familiar to every man, woman and child in the State of New Jersey. No individual enterprise has ever had the effect on any special class of trade that this firm has exerted on the clothing business. When the firm first started into business only the cheapest kinds of goods were manufactured into what was called ready made clothing; men who could afford it had their clothing made to order and ready-made clothing was looked upon as something very inferior. The firm set themselves to work to revolutionize this state of affairs and the success they have attained is attested by the enormous business they have built up in the three largest cities in the State. They used the best kind of goods for their stock and the public soon ascertained that a suit of clothes could be obtained just as good by patronizing this firm as by having goods made to order and that at a far lower price. Their business increased enormously and soon they were able to keep in stock all kinds of goods and of all sizes and shapes. Ready made clothing rose from the position it had hitherto occupied to one equal to that of the best custom-made goods. Marshall & Ball at present have three stores—one at Nos. 807 to 813 Broad street, Newark; one at Nos. 58 to 60 Newark avenue, Jersey City, and one at Nos. 221 and 223 Main street, Paterson. In Newark the firm occupies the whole of a large building and here the cutting and manufacturing is done. The Jersey City store was started in 1874 and five years later their business was established in Paterson. The business here under the management of Mr. Henry Diefenthaler continued to grow at such a rate that hired quarters were no longer sufficient and the firm purchased a plot of ground on Main street and erected its own building, of which a representation appears on another page. The salesroom is one of the handsomest in the city and occupies the whole of the first floor, being 42x100 in area, well lighted and well ventilated.

LOCKWOOD BROTHERS.—In 1852 Mr. W. Lockwood established the furniture business in Paterson at No. 48 Van Houten street and in November, 1873, he removed to Nos. 206, 212 and 204 Main street. Here his business extended very rapidly and he took his two sons, Frank S. and William J., into partnership with him, the firm name being W. Lockwood & Sons. On February 1, 1880, Mr. Lockwood retired and the business has since been carried on by his sons under the firm name of Lockwood Brothers. The business had assumed great proportions and for some years the firm found itself cramped in its quarters. Consequently in 1880 a material addition was erected to the

store so that it now runs through from Main street to Cross street. It has a frontage of fifty feet on Main street, twenty-five feet on Cross street and a total depth of two hundred and ninety feet. The Main street building has a basement and three stories; the Cross street building has a basement and four stories. The stores are supplied with two freight and one passenger elevator. The firm has always been successful, their business increasing largely every year.

GEORGE MELVILLE ELLIOT was born in Edinburgh, Scotland, on January 7, 1856. When he was about five years of age his family removed to London where he received his education. In 1868 he went back to Edinburgh where he learned the trade of watchmaker and jeweler. In 1873 he came to this country and at once took up his residence in Paterson where he was employed until 1879 by a prominent jewelry firm. In 1879 he began business for himself in a small room on the upper floor of the building on the northwest corner of Washington and Ellison streets, and by means of natural business capacity and strict attention to business soon accumulated enough to warrant him in opening a store on the first floor of the building on the northwest corner of Van Houten and Washington streets. The energy with which he looked after his business, his uniformly courteous manner and fair dealing with all soon made his quarters too small for an ever increasing business and he obtained possession of the large store at No. 194 Main street where he has since conducted his business. No merchant stands higher in the estimation of his friends and customers than Mr. Elliot and his business is continually assuming larger proportions. The transition from the time, only a few years ago, when he did all his own work, to his present business, when he continually employs eight men, is sufficient evidence of his qualifications as a business man. He was the first jeweler in the city who found it necessary on account of the extent of his business to employ a delivery wagon. Mr. Elliot is a member of the Board of Trade and of a number of prominent societies in Paterson and has always taken a commendable interest in all projects looking to the welfare of the public.

MEYER BROTHERS.—The Boston store, Nos. 181 to 187 Main street, and Nos. 116 and 118 Washington street, was established in Paterson about ten years ago by Meyer Brothers who were at that time doing a flourishing dry goods business in Newark. They opened a store on the corner of Main and Market streets and their enterprise and low prices soon attracted a great deal of trade. In a short time the store, spacious as it was, proved too small for them and as on account of the architecture of the building an enlargement could not be had they took a lease for a long number of years on the Van Sam building which was then in the course of erection. Although they had the largest floor space of any business in the city they soon found that they were cramped and that additions would be absolutely necessary. Accordingly in 1890 they purchased the property on Washington street lying immediately in

the rear of their Main street stores and thereon they erected a fine building having a frontage on Washington street of sixty-five feet and a depth of a hundred feet. The new building, which is four stories high, contains all the modern improvements and connects with the Main street building, forming as it were one solid building, all the floors connecting and running through from Main to Washington street. All the different departments are reached by elevators so that the top floor is now as easy of access as any part of the store. Several new departments were added, viz—carpets, furniture, clothing, millinery, upholstery, dressmaking and house furnishing in all its branches. Over a hundred clerks are employed and nearly every European language is spoken. The delivery wagons of the firm may be seen almost at any time of the day and evening in almost any part of the city. The firm has also another establishment nearly as large in New Brunswick, N. J.

SAMUEL NATHAN, one of the most prosperous and respected business men of Paterson, was born in Czempin, Prussia, on May 12, 1813. He enjoyed the advantages of the educational facilities of his native home until he was about seven years of age when his family removed to this country. They proceeded at once to Providence, R. I., where young Nathan attended school for two years, at the expiration of which time his family removed to New York city where he completed his education. At the age of thirteen he was employed in a mercantile establishment in New York and at the age of fifteen was made salesman, his natural business abilities having secured him this rapid promotion. At the age of twenty he started in business for himself in Fulton street, dealing in gentlemen's furnishing goods. In May, 1866, he removed to Paterson and opened a clothing and merchant tailoring establishment on the southwest corner of Main and Ellison streets. On account of the sale of the building three years later he was compelled to vacate and for two years and a half occupied a store on Main street a short distance south of his former location. In 1871 Mr. Samuel Smith and Mr. James Jackson had erected a fine row of business houses on Market street; at that time Market street was not a business thoroughfare; although in the heart of the city trade had not found its way out of Main street and Market street was lined principally with residences. Mr. Smith and Mr. Nathan had been on terms of the closest friendship for a long time and Mr. Nathan, with a perspicacity which has assisted him in establishing his business, saw that it would be but a question of a short time before trade would find its way into Market street; he accordingly led the way which has been followed by so many others since and became the pioneer of trade in Market street; he leased one of the stores in the Smith & Jackson block and some time afterwards acquired by purchase the adjoining property on the corner of Market and Church streets. He first occupied the building adjoining that occupied by the Second National Bank but when sometime afterwards a neighboring and larger store was made vacant he removed to this in

order to increase his facilities, this step being made necessary by his increasing business. Strict attention to business, assisted by courteous demeanor and a well earned reputation for integrity and fair dealing, soon established a business which in itself was a guarantee of success. In 1881 Mr. Nathan erected a fine building on the property acquired by him a few years previous and became the owner of one of the handsomest business structures in the State. The lower floor of the building is used for business purposes, the upper floors are used for the rooms of the District Court and as lodge and meeting rooms. Mr. Nathan is a leading director in the Second National Bank in the Colt Land Company and the Home Land Company and occupies other honorary positions testifying to the confidence the citizens of Paterson repose in him.

FRANK W. ALLEN was born in North Kingstown, R. I., on July 10, 1851, and received his education at the Providence Conference Seminary. He then became a clerk in a wholesale flour and grain house in Hartford, Ct., and was subsequently employed by the same firm in Springfield, Mass. In 1877 he went into the dressed beef business on his own account in Worcester, Mass., remaining there for five years, at the expiration of which time he came to Paterson. No western dressed beef business had been established yet in this city and shortly after the old way of bringing cattle and slaughtering in Paterson was completely changed to western dressed brought in refrigerator cars. He erected refrigerators near the tracks of the Delaware, Lackawanna & Western railroad and in 1880 obtained possession of commodious quarters in Washington street, nearly opposite the city hall. The latter proved of great convenience to his patrons, as it was easy of access. Mr. Allen supplied his establishment with all the modern improvements in his line of business and was the first in the state to have an ice machine in operation for the cooling of dressed beef. He was the first to introduce the killing of hogs in Paterson and this experiment was attended with so great a success that now the number of hogs slaughtered at his establishment at times reaches an average of twelve hundred a week. Progress and success have marked every year of Mr. Allen's career in this city and the number of his friends increases with the circle of his acquaintanceship, for Mr. Allen is of a quiet and pleasing disposition and fair and liberal dealing are characteristic of him. He is a director of the Paterson National Bank and enjoys the confidence of all who have ever met him.

PATRICK HENRY SHIELDS was born in the north of Ireland on January 12, 1837, being the oldest of nine children. His parents came to America in 1836, settling in Paterson, N. J., where they remained a year or two, when they removed to Little Falls. In 1858 the family removed again to Paterson and Mr. Shields entered a grocery store and in the course of five years acquired such an insight into the business that he set up for himself in 1863 with the little capital he had been able to accumulate by the closest economy after liberally aiding his family. By his

steady industry and honesty in trade he soon acquired an enviable reputation and although through his proverbial generosity he has at times lost heavily his business has constantly been growing until he is now one of the most extensive grocers in Paterson. A number of years ago he took one of his brothers, Mr. Walter G. Shields, into partnership with him. Thus it will be seen that Mr. Shields is emphatically a self-made man and he is a very creditable specimen of that sort of production. In 1871 he was elected to the Board of Chosen Freeholders, remaining in that body for five years, during all of which time he was one of the leading spirits in shaping its policy and controlling its measures. He was chosen director in 1872-3-4-5. Largely through his influence the Board inaugurated the policy of building permanent iron bridges, in consequence of which the county now spends very little in repairs of bridges. In the fall of 1881 he was elected to the Assembly by a majority of 952, which the three wards composing his district never gave to any other man, a fact which sufficiently attests his popularity among all classes. He was re-elected the following year. In March, 1888, he was elected County Collector and has held that office ever since.

JAMES BELL was born on October 8, 1835, in County Down, Ireland, where his family were engaged in the manufacture of linen. Mr. Bell landed in this country on the 11th of April, 1854; the vessel in which he came was shipwrecked and instead of landing in Boston landed in Newport. Mr. Bell at once proceeded to Boston, where he was engaged in the rubber business until November, 1860, when he removed to Paterson. Here he went into the business of importing wines and other articles of merchandise at the store which he still occupies in Market street; he also at once took an interest in various manufacturing and mercantile projects. In 1866 he began the development of Riverside, at present a flourishing section of the city. He organized the Riverside Land Improvement Company in 1866 and at its dissolution in 1872 he owned one-fourth of the property held by the company. This company induced the New Jersey Midland railroad company—now the New York, Susquehanna & Western railroad company—to lay its tracks through Paterson by subscribing \$12,000 to the capital stock of the railroad company, the latter locating its route through the property owned by the land company. In 1868 Mr. Bell purchased the Hilliard place and at present occupies a portion of it as a residence. He has located fourteen mills and manufacturing establishments in this city, all with one exception on property owned by him. He was one of the first subscribers to the Paterson & Little Falls horse railroad company. He had large interests in the Passaic and Orange oil companies and in the Excelsior and Empire oil companies, the latter being the first companies of their kind organized in this county. He secured the charter and organization of the People's Gas Light company of Paterson, a corporation which reduced the price of gas to manufacturers from \$3.80 to \$1.50 per thousand, and he

has been largely interested in nearly every work of importance undertaken in Paterson. At the present day he is the owner of a great deal of valuable real estate. In 1889 he erected the Bell building on the corner of Market street and Ramapo avenue, an illustration of which appears on another page. He has just completed the Bunker Hill mills at Riverside and leased them for a long term of years to W. & J. Sloane, of New York, for the manufacture of tapestry, thus introducing another new industry in the city.

JAMES WILSON is a Scotchman by birth and came to Paterson twenty-seven years ago. He established a coal business in which he has been very successful, due to his business rule of liberal and honest dealings with all. He has extensive sheds on Marshall street with considerable frontage on the Morris canal. He supplies a large number of the mills and manufactories in Paterson with coal and his business is continually increasing. He has been prominent in public affairs and his judgment is frequently sought when matters of importance to the city and the public are to be considered. He served as one of a committee appointed at a public meeting for the selection of parks for Paterson and the subsequent action of the Board of Aldermen in purchasing the sites selected and the general public approval of this course bore testimony to Mr. Wilson's excellent judgment.

THE HOBART-STEVENSON BUILDING.—The Hobart-Stevenson building was erected in 1888 and is the property of Mr. Garret A. Hobart and Mr. Eugene Stevenson. The property is situated on Washington street adjoining the City Hall. For a long number of years the lots on which it stands were unimproved, the property being too valuable for residences. Mr. Stevenson conceived the idea that it would be an excellent place for a building for offices and Mr. Hobart having joined him in his enterprise the result was the erection of the building, an illustration of which appears on page 62. The judgment of the gentlemen owning the property was excellent, for before the building had been completed every room and the four stores

on the ground floor had been leased. The Passaic Water Company and a number of lawyers and real estate agents have their offices in the building.

N. LANE.—Paterson is certainly well provided in the line of photographers who are continually vying with each other in the production of the best work. Recognizing the fact that photography as applied to portraits had the field well covered Mr. Lane a number of years ago devoted himself exclusively to photographing buildings, machinery, interiors and similar work. He found here ample opportunity for the display of his talents and as little had been done in this direction before, his efforts were the more appreciated. No photographer had made a specialty of this class of work and Mr. Lane soon found himself master of the situation. His work is perfect in every respect and his camera is constantly in demand. He has made thousands of views for manufacturers and others and in every case given entire satisfaction. Most of the engravings in this work are from photographs taken by Mr. Lane, he having been selected on account of his superiority in this class of work.

THE COTTAGE ON THE CLIFF.—Thousands of people are annually attracted to the Falls of the Passaic for the purpose of viewing this great masterpiece of nature. The grounds about the cataract have been improved in many ways and contain three of the reservoirs of the Passaic Water Company. The Valley of the Rocks, a deep gorge below the Falls, still retains its pristine grandeur unimpaired. Excursions and target companies from New York, Newark, Jersey City and more remote points visit the Falls in large numbers every year. At present the grounds are in charge of Mr. Henry Baum, who has also secured a lease on the Cottage on the Cliff, situated romantically on a high ledge of rock overlooking the Valley of the Rocks and the city of Paterson. A dancing platform, carousel, shooting gallery and bowling alleys are among the attractions on the grounds.



MISCELLANEOUS.



THE railroad facilities of Paterson are unsurpassed. The principal railroad passing through the city, and one which on account of the liberality and energy of its management has absorbed and continues to retain most of the traffic, both freight and passenger, is the New York, Lake Erie & Western. It runs upwards of fifty trains a day each way with a corresponding number of freight trains. No difficulty has ever been experienced in the way of running switches to the various manufacturing establishments of importance and the company has ever lent a willing ear to requests for more depots or facilities of other kinds. It has ever been foremost in all improvements and has assisted materially in building up the city.

The New York, Susquehanna & Western railroad skirts the eastern boundary of the city and in order to obtain a fair share of the city's traffic has built a spur into the heart of the city. A similar course has been pursued by the Delaware, Lackawanna & Western railroad company whose main line skirts the western boundary of the city. It will consequently be seen that no matter how much Paterson extends itself the railroad facilities will be ample.

The rates of freight between Paterson and New York and other points are low and commutation rates to New York for passengers amount to about five dollars a month, allowing the holders of the tickets one ride each way for every day in the month. Family tickets which may be used by any member of the family or guest or person in any way attached to the family, are sold at \$12.50 for twenty-five trips.

The sewer system of the city has been greatly extended within the past few years. In 1882 the legislature passed a law permitting the construction of sewers by a new method: sewers are built at the request of property owners along the line of the proposed sewers and the property is assessed for the benefits conferred. If the sewer is a large main sewer the city pays a portion of the expense, generally about one-half; lateral sewers are generally constructed at the expense of the property owners benefitted. In this way sewers cost the property owners from \$25 to \$50 per lot and after that no further sewer taxes are levied. In this way every portion of the city has been provided with sewers. The latter discharge into the Passaic river which flows through the centre of the city; it is a rapidly running stream with numerous rapids and few pools, so that the sewage is quickly and entirely removed.

The charter of the city prohibits the Board of Aldermen from incurring any expense in any year exceeding a tax of two and a half per cent. on the total valuation of the prop-

erty in the city. The valuations made by the assessors are equal to about thirty per cent. of the market value of the property. Since the adoption of high license a few years ago a considerable portion of the city's expenses is paid by the tax on the liquor traffic. The State has no debt, its expenses being paid by taxes on railroads and similar corporations, and consequently there is no State tax. The last cent of the county's debt was paid several years ago and so the county tax amounts to just sufficient to make the necessary or desirable improvements. The management of the city and county affairs has always been conservative.

The city has a large number of fine churches of every denomination, a few of which are shown on other pages.

All the prominent secret societies are represented in Paterson by several lodges or councils. There are large numbers of fraternity insurance organizations and a number of athletic, boating and similar organizations.

The fire department of the city is one of the most efficient in the country. A few years ago it was almost altogether voluntary but recently this has been changed to a department on a paid basis. There are nine engine companies, three truck companies and a chemical engine companies, all equipped with horses and full corps of men. Rates of insurance consequently are very low.

Paterson has an efficient Board of Health and has been free from anything like epidemics of disease for many long years. This is principally due to the energetic manner in which the Board of Health takes hold of all cases of contagious diseases. Places where scarlet fever, diphtheria and similar diseases occur are at once quarantined and after the disease has disappeared thoroughly fumigated by an officer appointed for that purpose. Cases of small pox, which have been exceedingly rare, are at once removed to the city pest house, outside of the city limits; this establishment has not been used for many years. A sanitary officer also looks after all the meat and food offered for sale and the offering for sale of adulterated food or bad meat is severely punished.

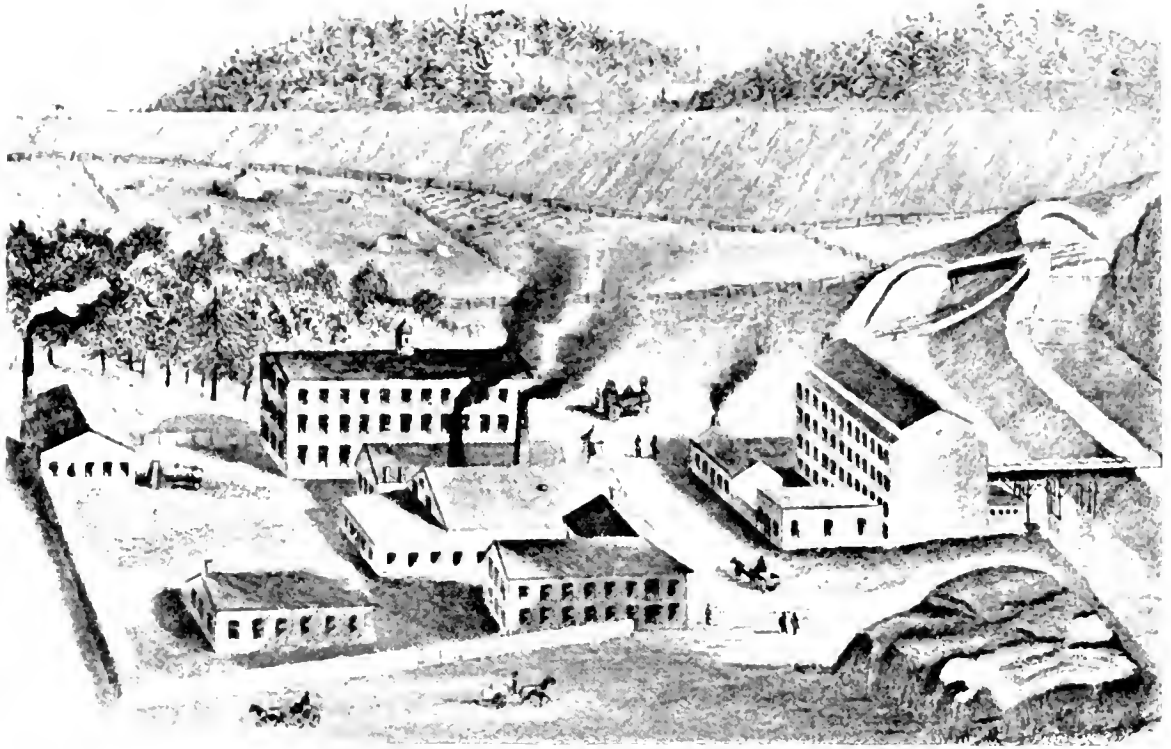
Paterson's population, according to the official census, has increased as follows:—

1820	1,578	1860	19,585
1821	1,787	1865	21,893
1827	5,236	1870	33,581
1832	9,085	1875	38,821
1840	7,598	1880	51,084
1850	11,341	1885	63,273
1855	16,458	1890	78,165

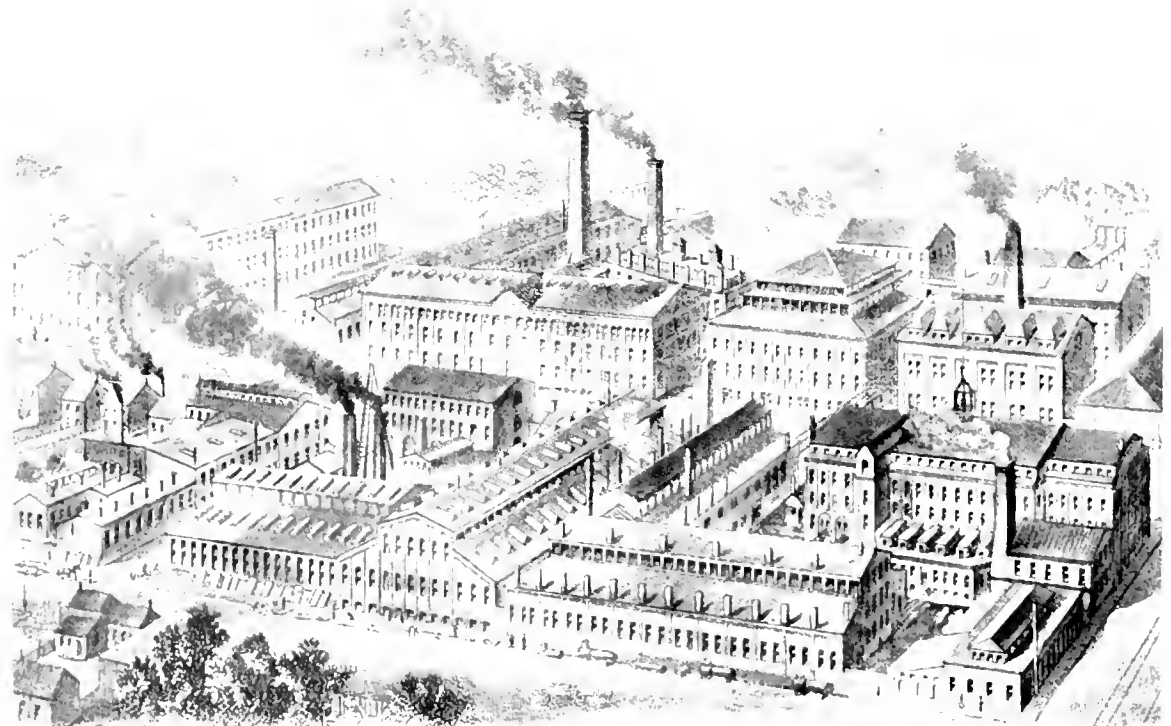
INDUSTRIES.



THOMAS ROGERS.



THE ROGERS LOCOMOTIVE AND MACHINE WORKS IN 1830



THE ROGERS LOCOMOTIVE AND MACHINE WORKS AT THE PRESENT DAY.



ROBERT S. HUGHES.

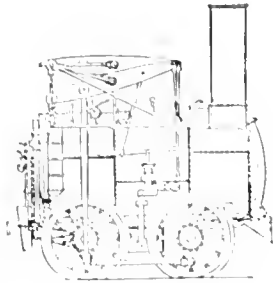


FIG. 1

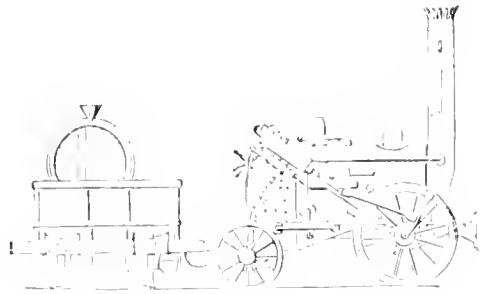


FIG. 2.

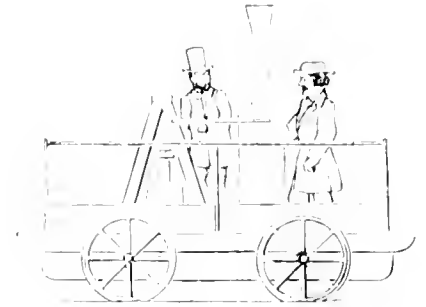


FIG. 3.



FIG. 4

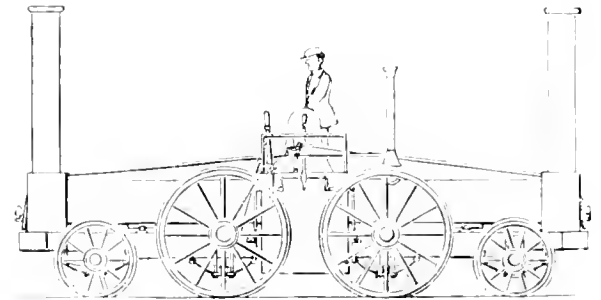


FIG. 5

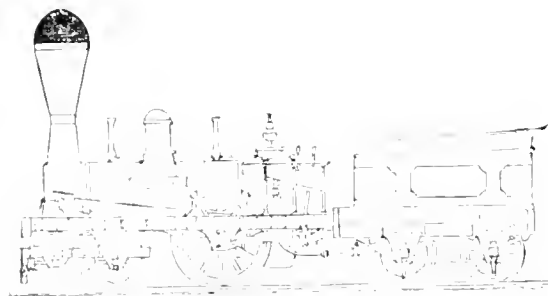


FIG. 6.

SOME OLD LOCOMOTIVES

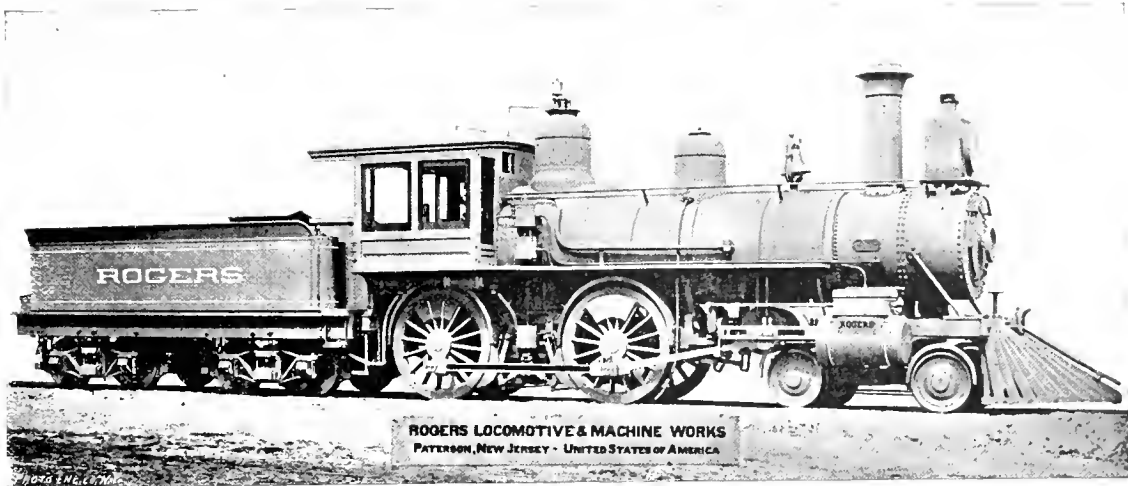


FIG. 1.



FIG. 2.

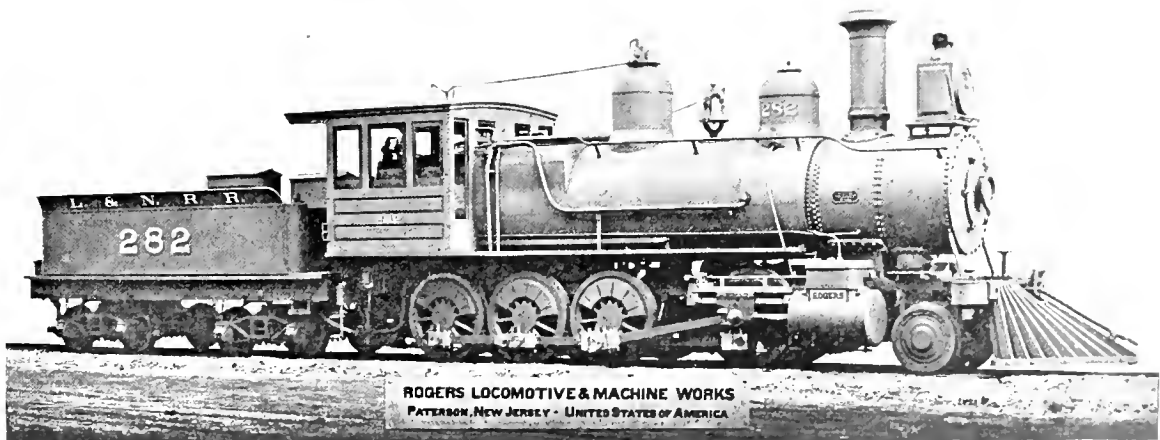
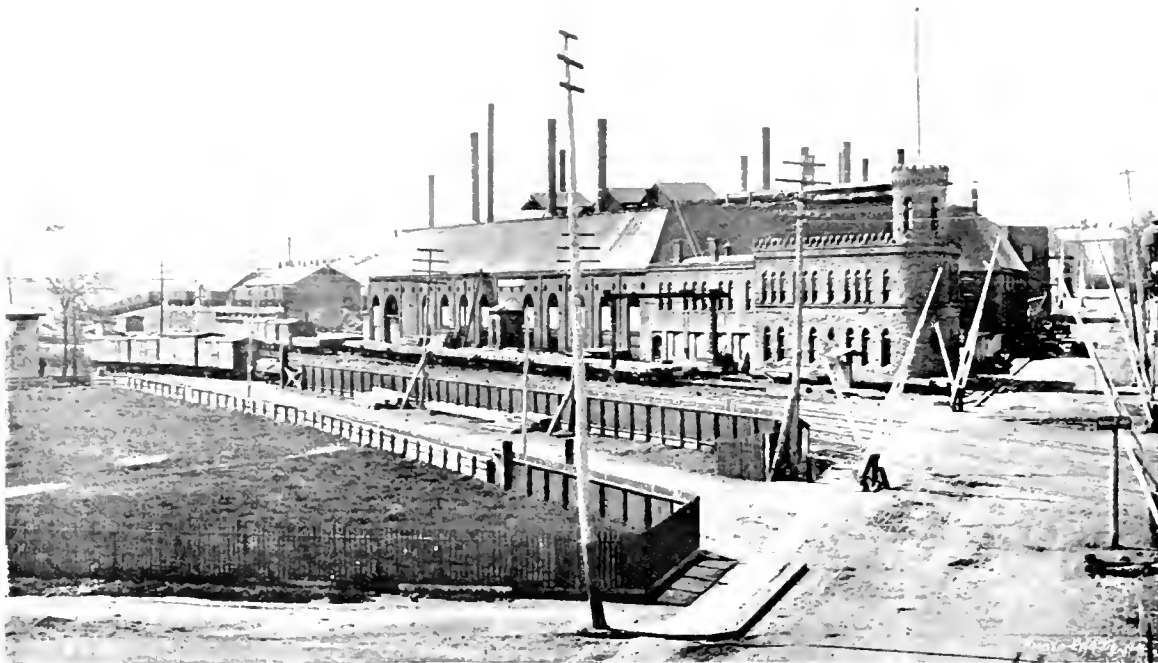


FIG. 3.

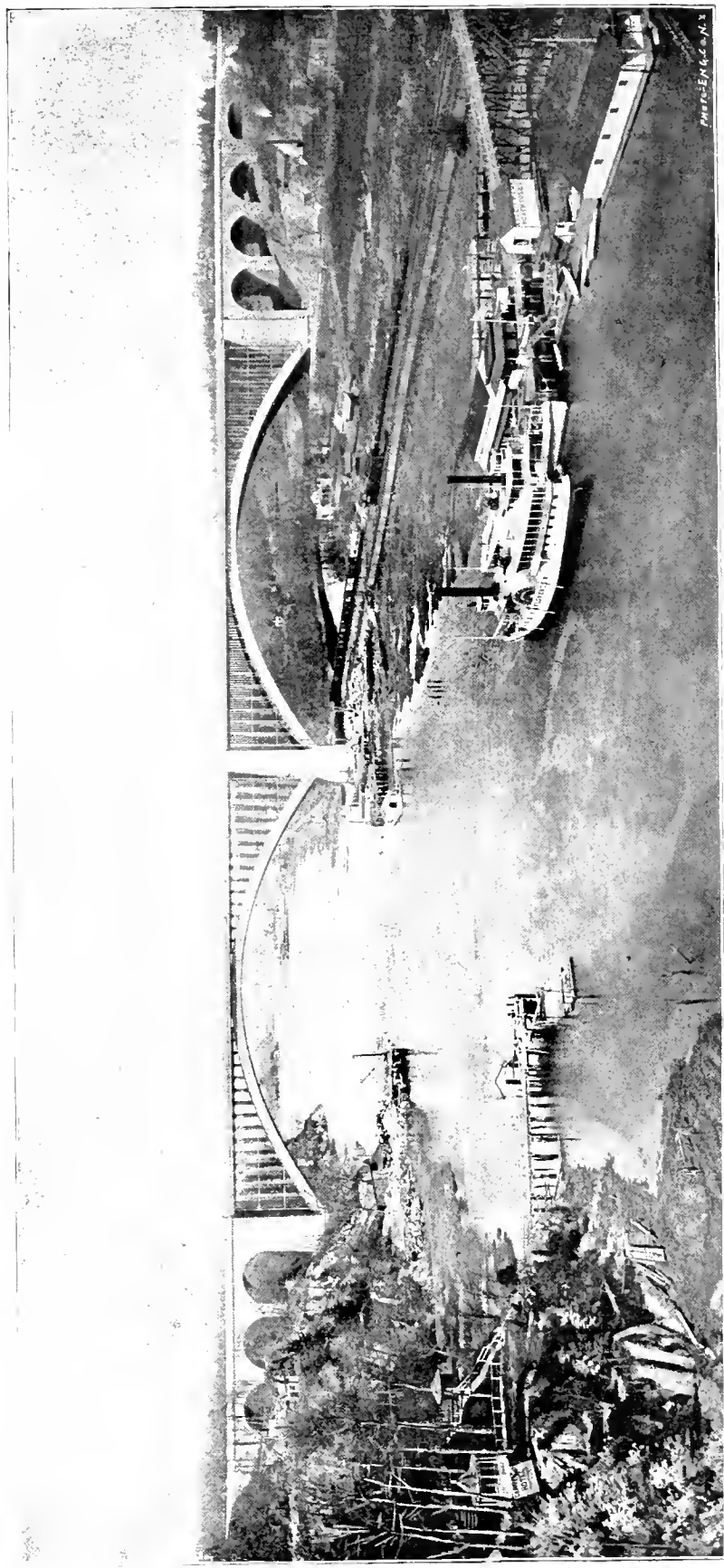
LOCOMOTIVES BUILT BY THE ROGERS LOCOMOTIVE AND MACHINE WORKS.



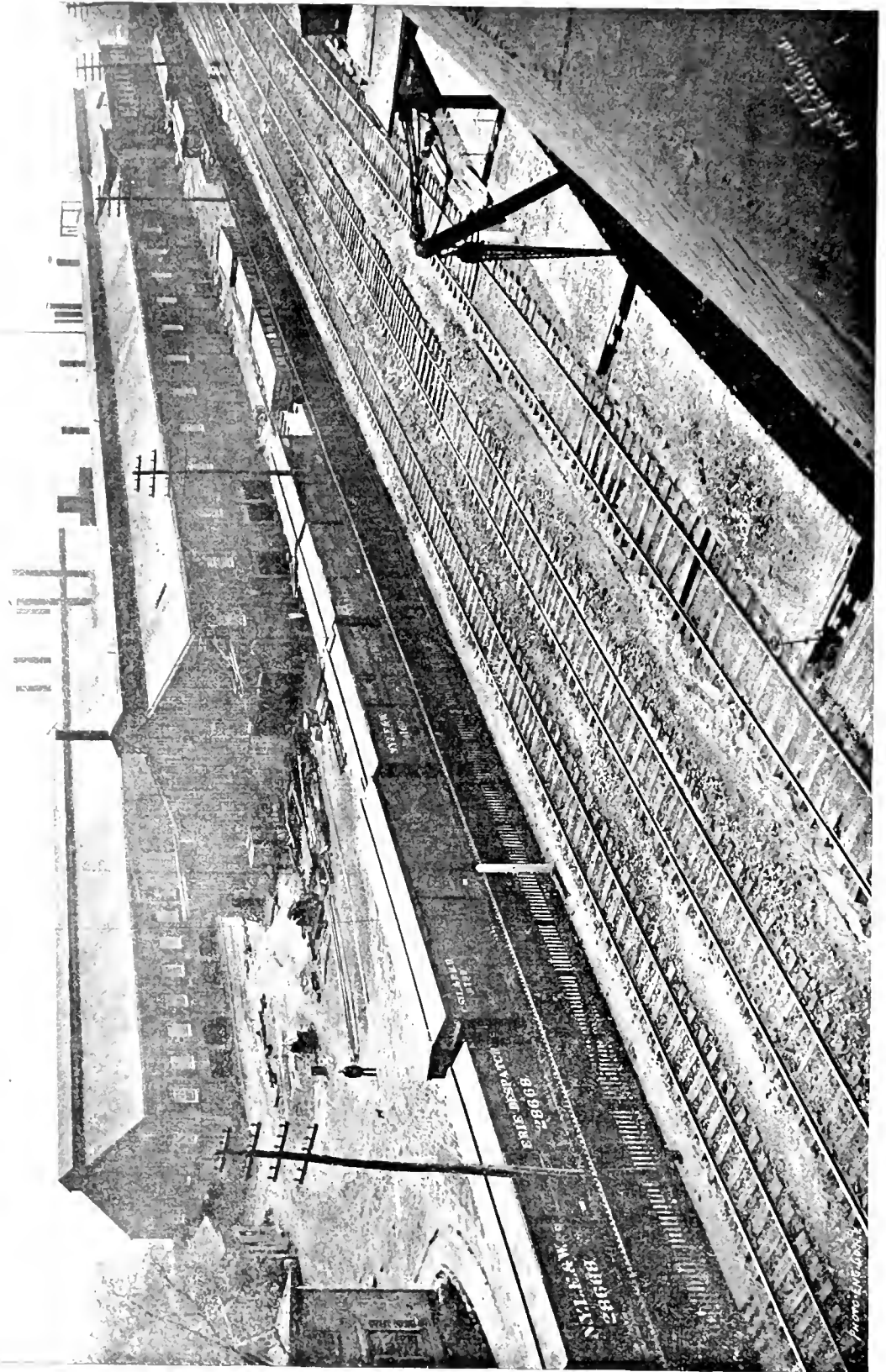
FRONT VIEW OF THE PASSAIC ROLLING MILL COMPANY'S WORKS.



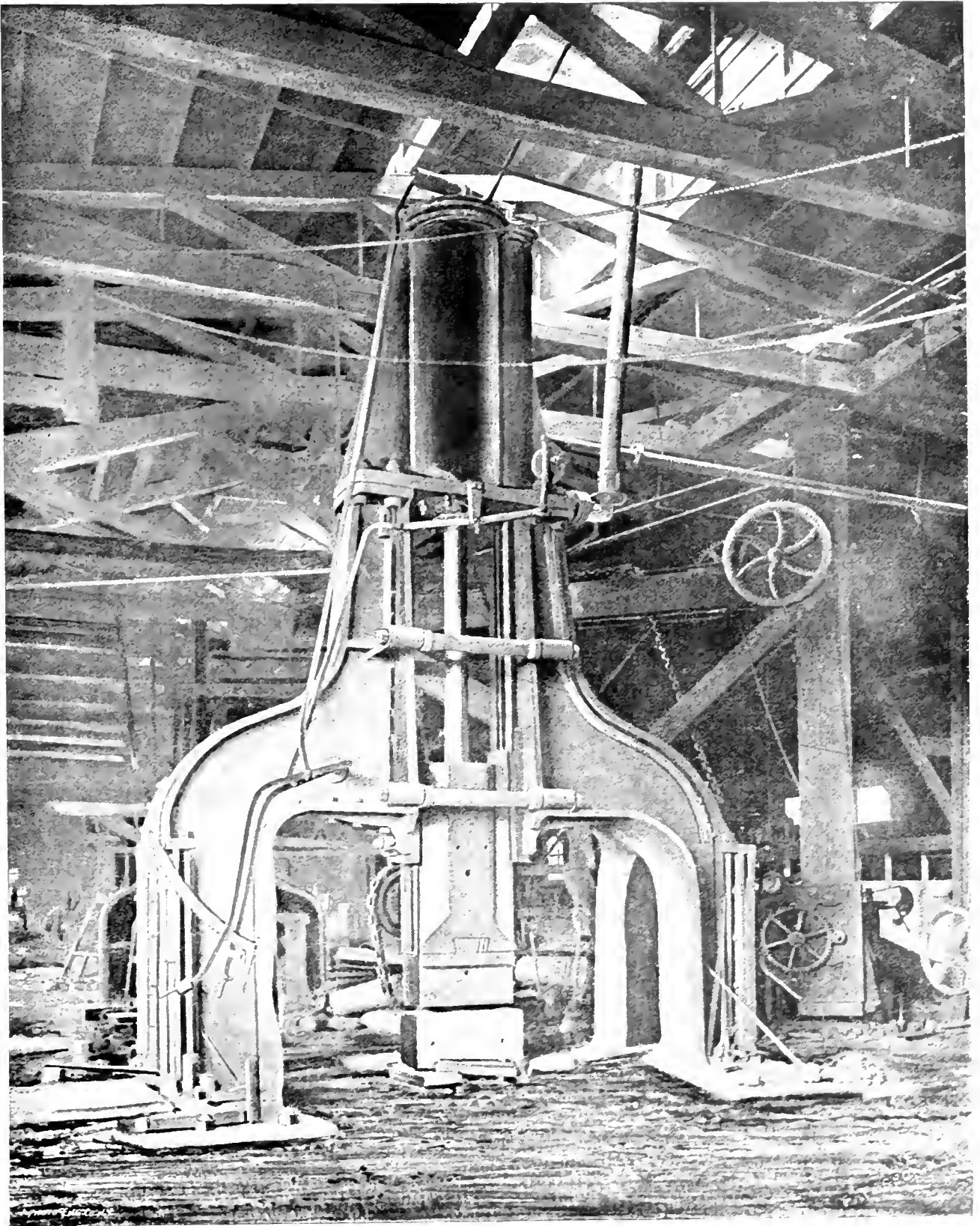
REAR VIEW OF THE PASSAIC ROLLING MILL COMPANY'S WORKS



WASHINGTON STONE BRIDGE, BUILT BY THE PASSAIC ROLLING MILL COMPANY.



THE PATERSON IRON WORKS.



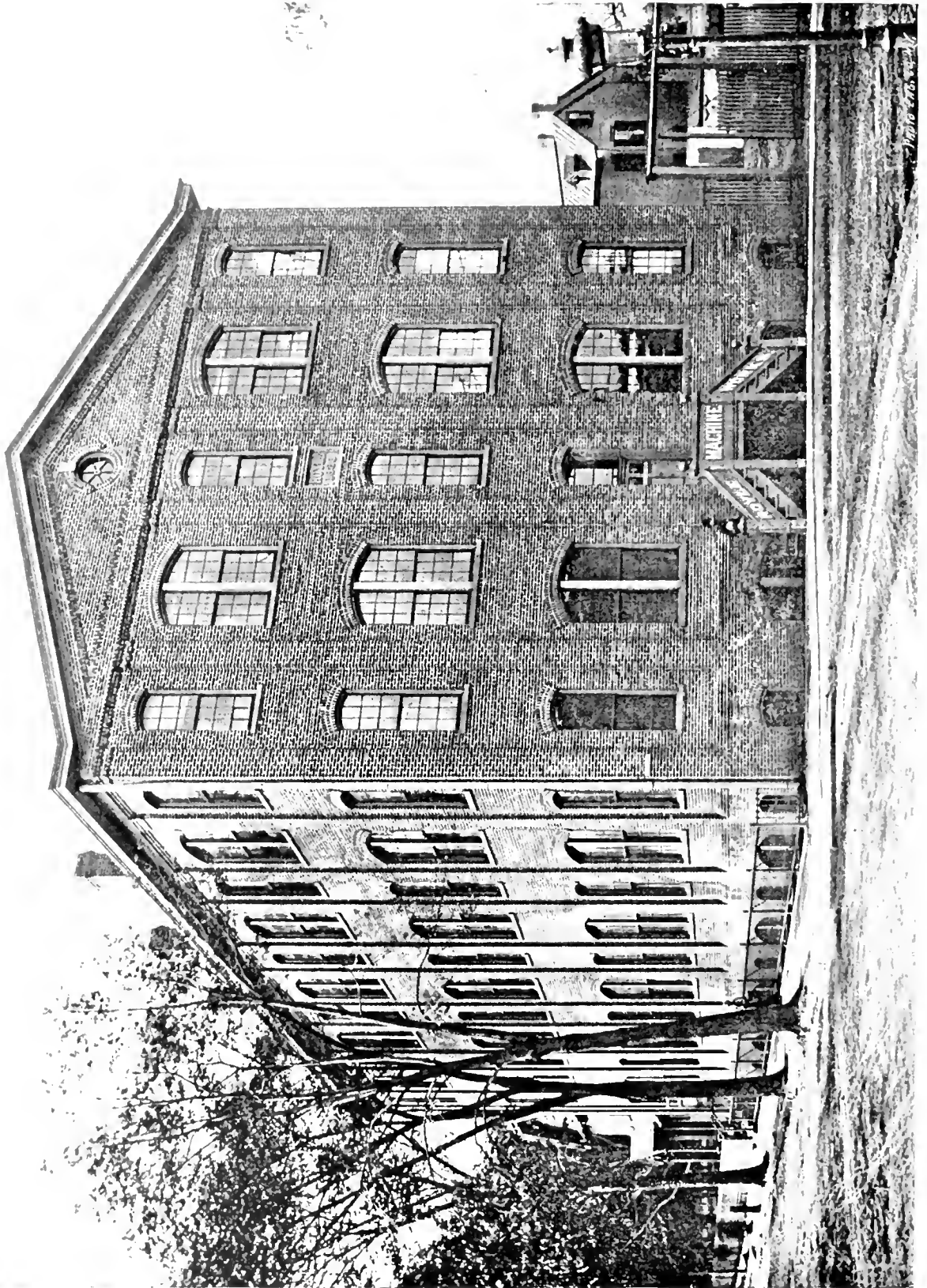
HAMMER IN THE PATERSON IRON WORKS



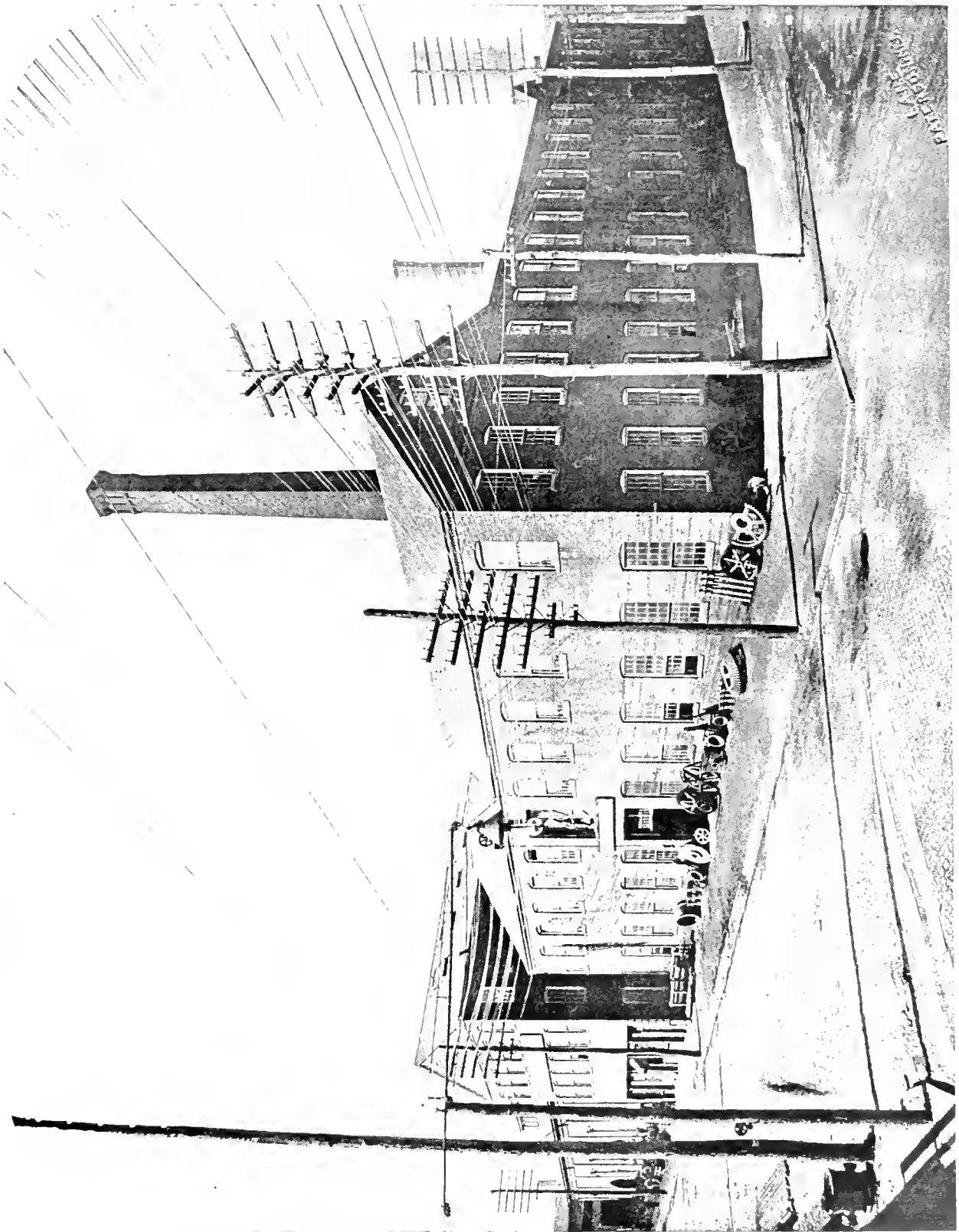
FRANKLIN C. BECKWITH



CHARLES D. BECKWITH.



THE ROYLE MACHINE WORKS



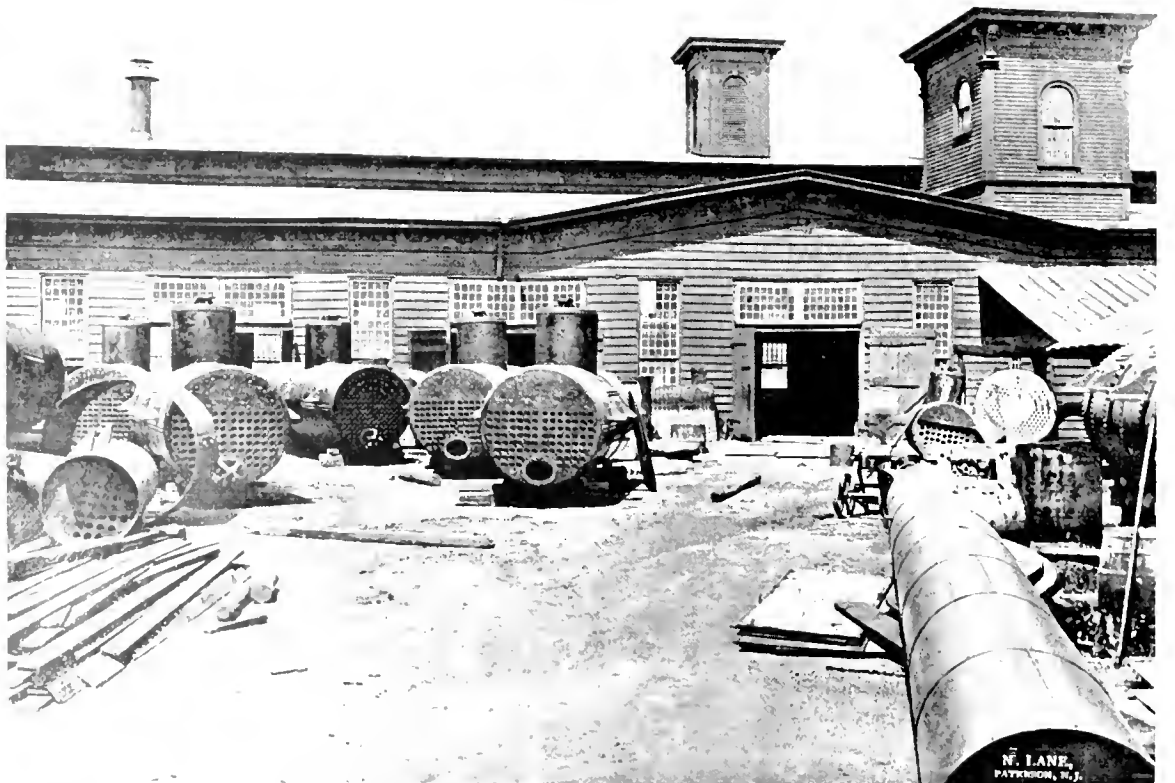
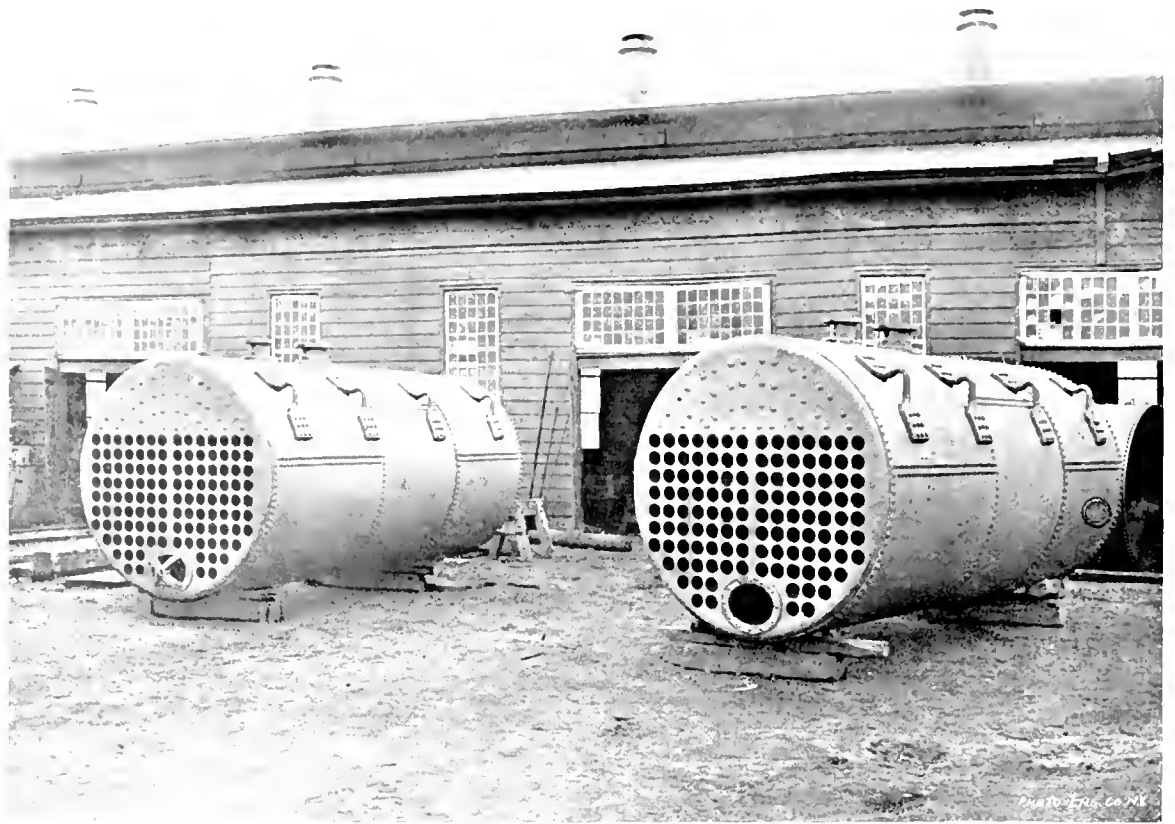
THE WATSON MACHINE WORKS



WILLIAM G. WATSON.



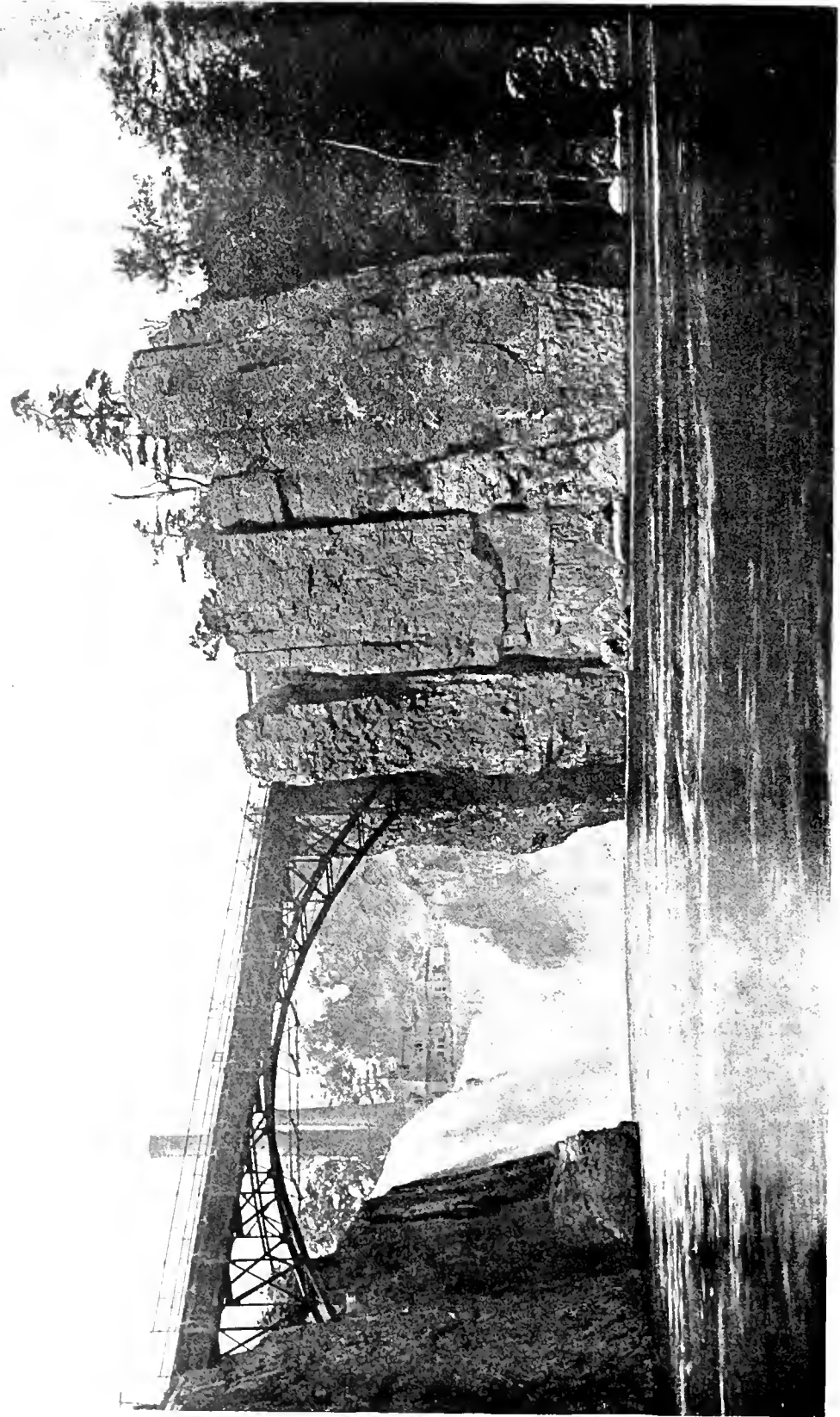
JAMES WATSON.



BOILER WORKS OF SAMUEL SMITH & SON.



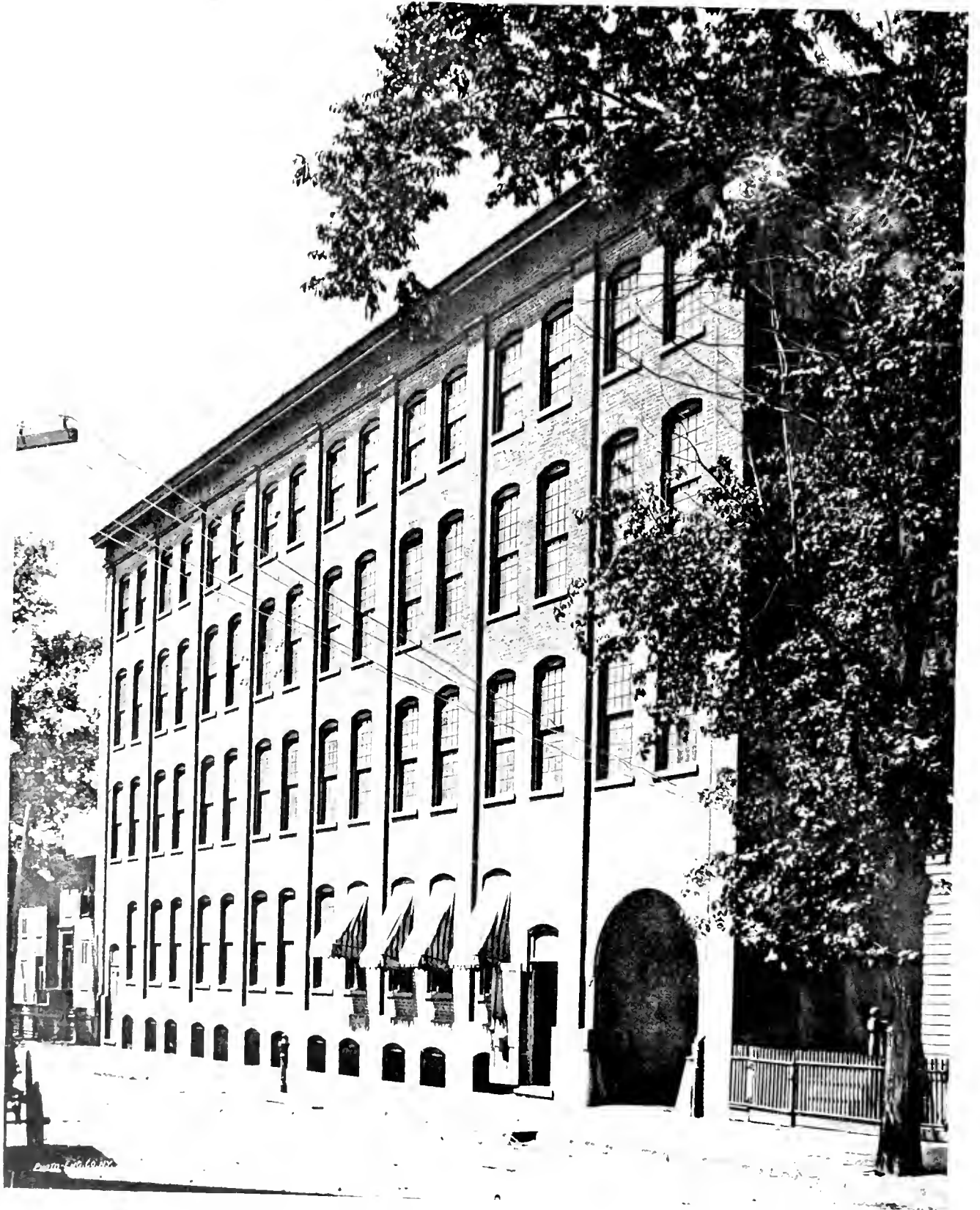
SAMUEL SMITH.



CHASM BRIDGE, BUILT BY THE RIVERSIDE BRIDGE AND IRON WORKS



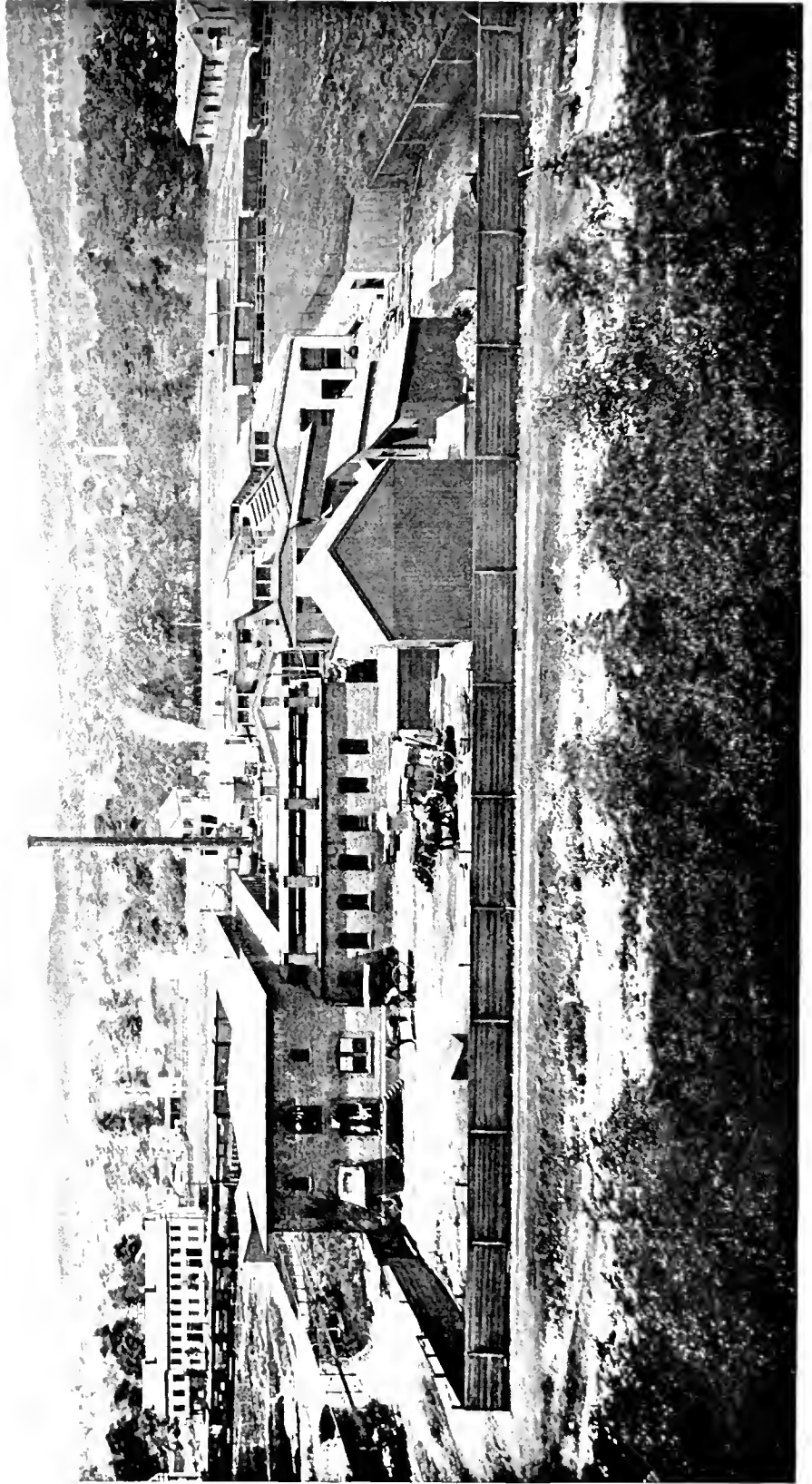
RAILROAD AVENUE MILL OF BENJAMIN EASTWOOD.



STRAIGHT STREET MILL OF BENJAMIN EASTWOOD.



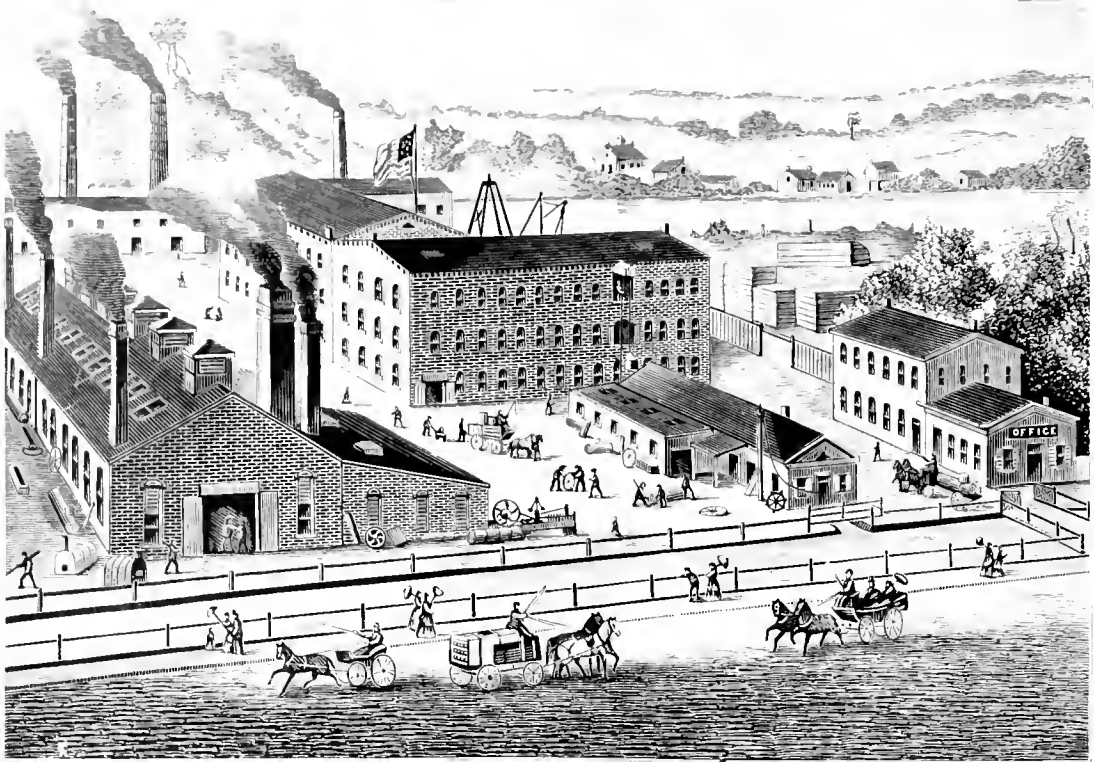
BENJAMIN EASTWOOD.



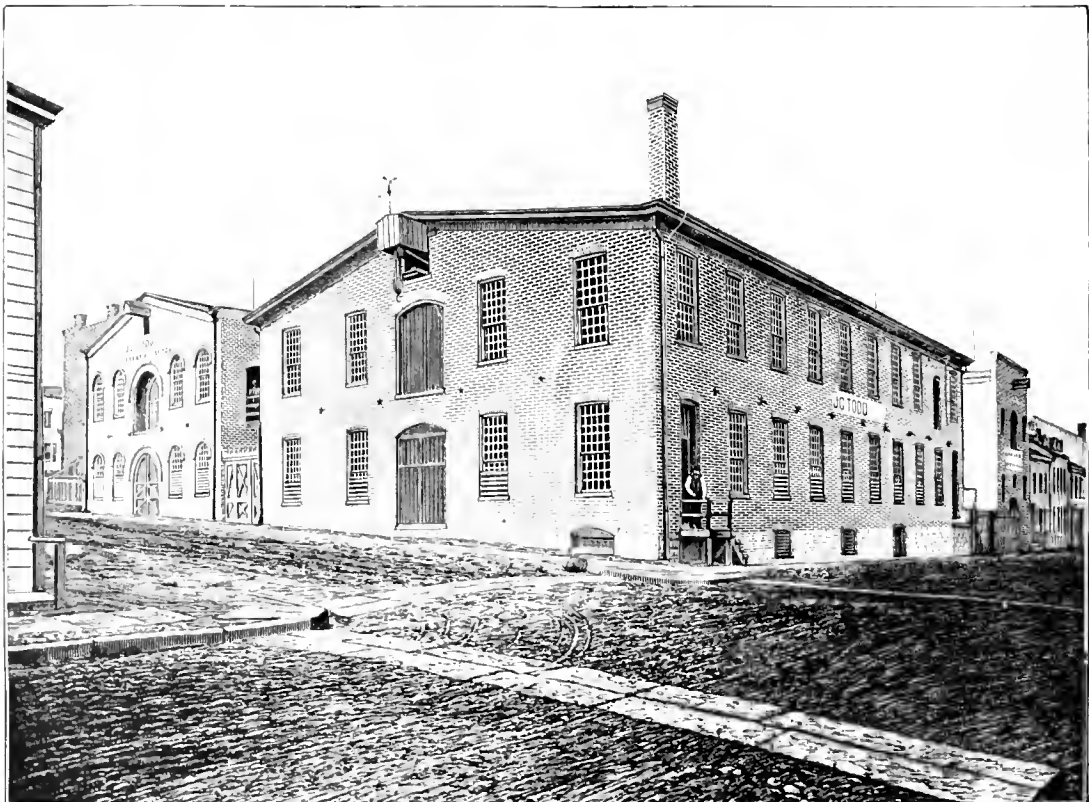
THE KEARNEY & FOOT COMPANY'S FILE WORKS.



ROBERT ATHERTON.



MACHINE WORKS OF J. C. TODD.



JUTE MILL OF J. C. TODD.



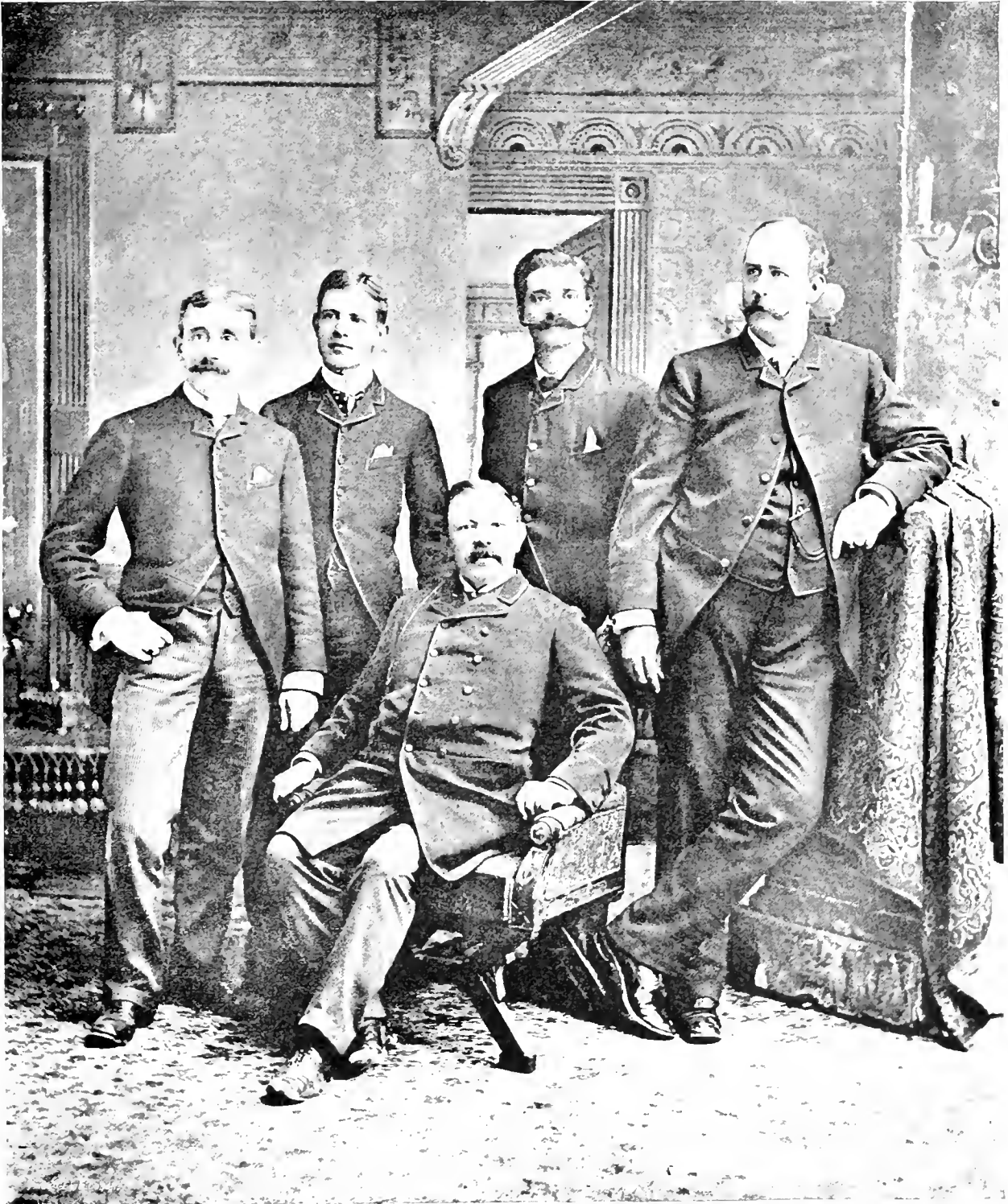
JOSEPH C. TODD.



PIONEER SILK CO.



PIONEER SILK COMPANY

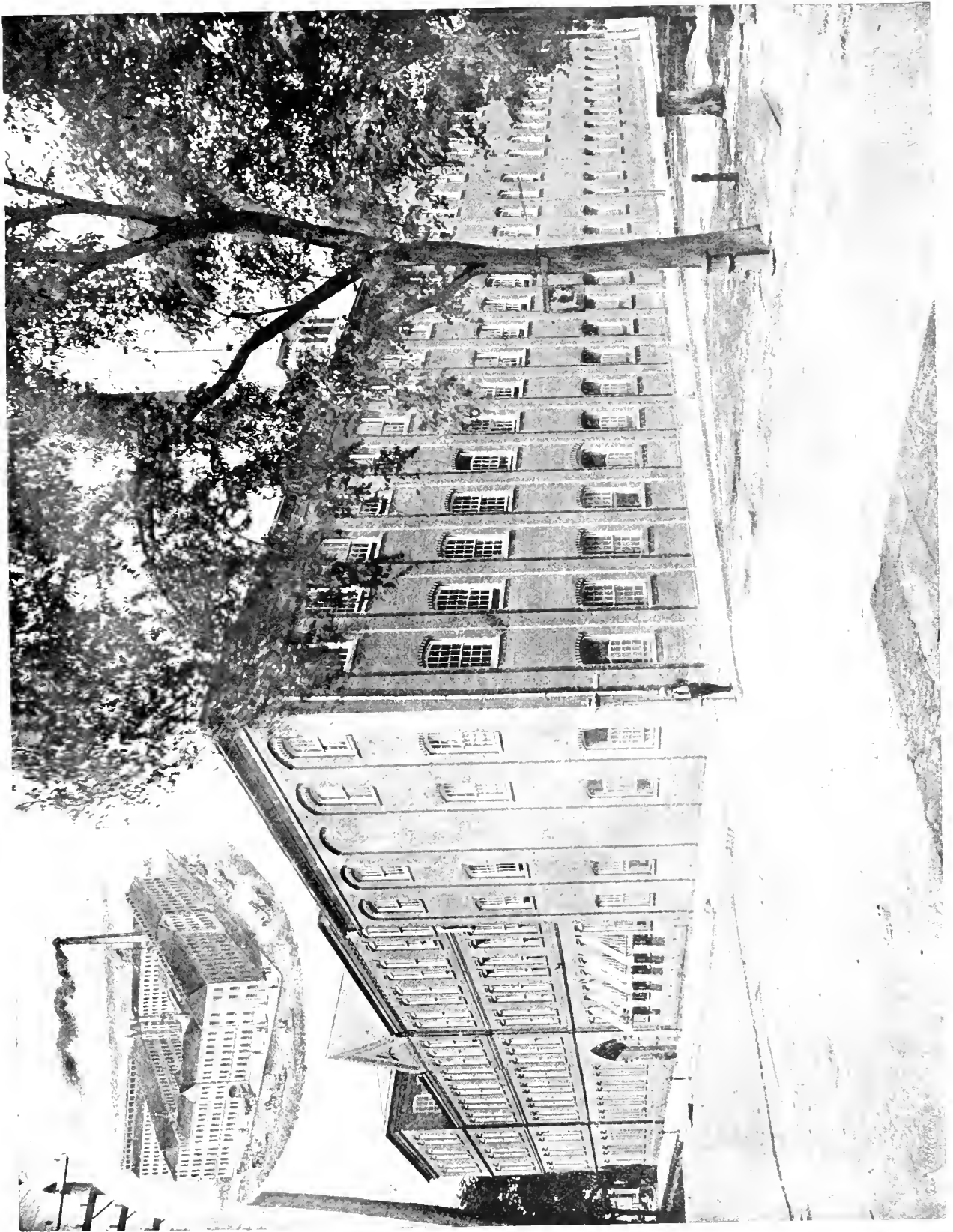


DEXTER, LAMBERT & CO.

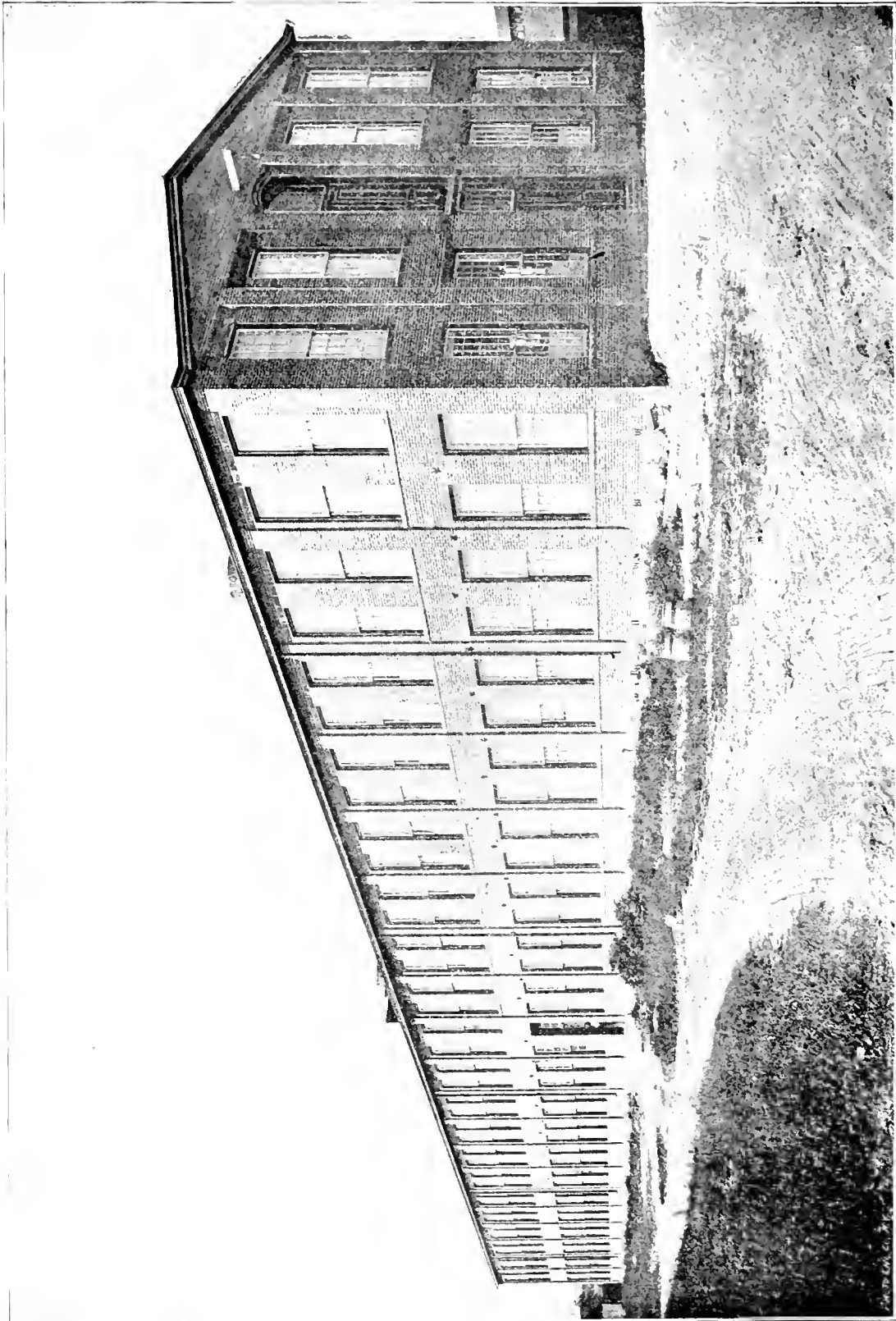


SILK MILLS OF DEXTER, LAMBERT & CO

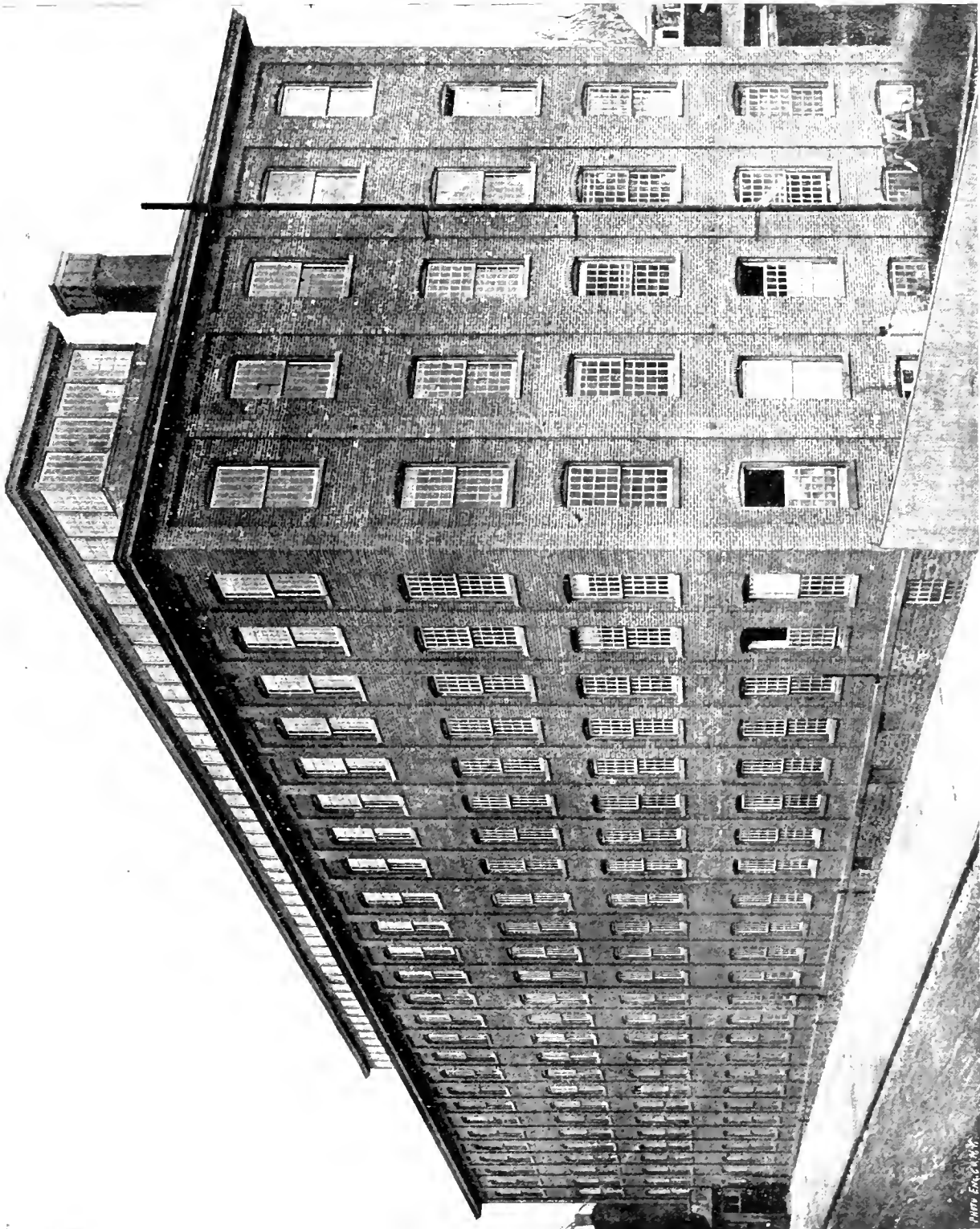
PHOTOGRAPHY



SILK MILL OF THE WILLIAM STRANGE MANUFACTURING COMPANY.



SILK MILL OF THE PATERSON RIBBON COMPANY.



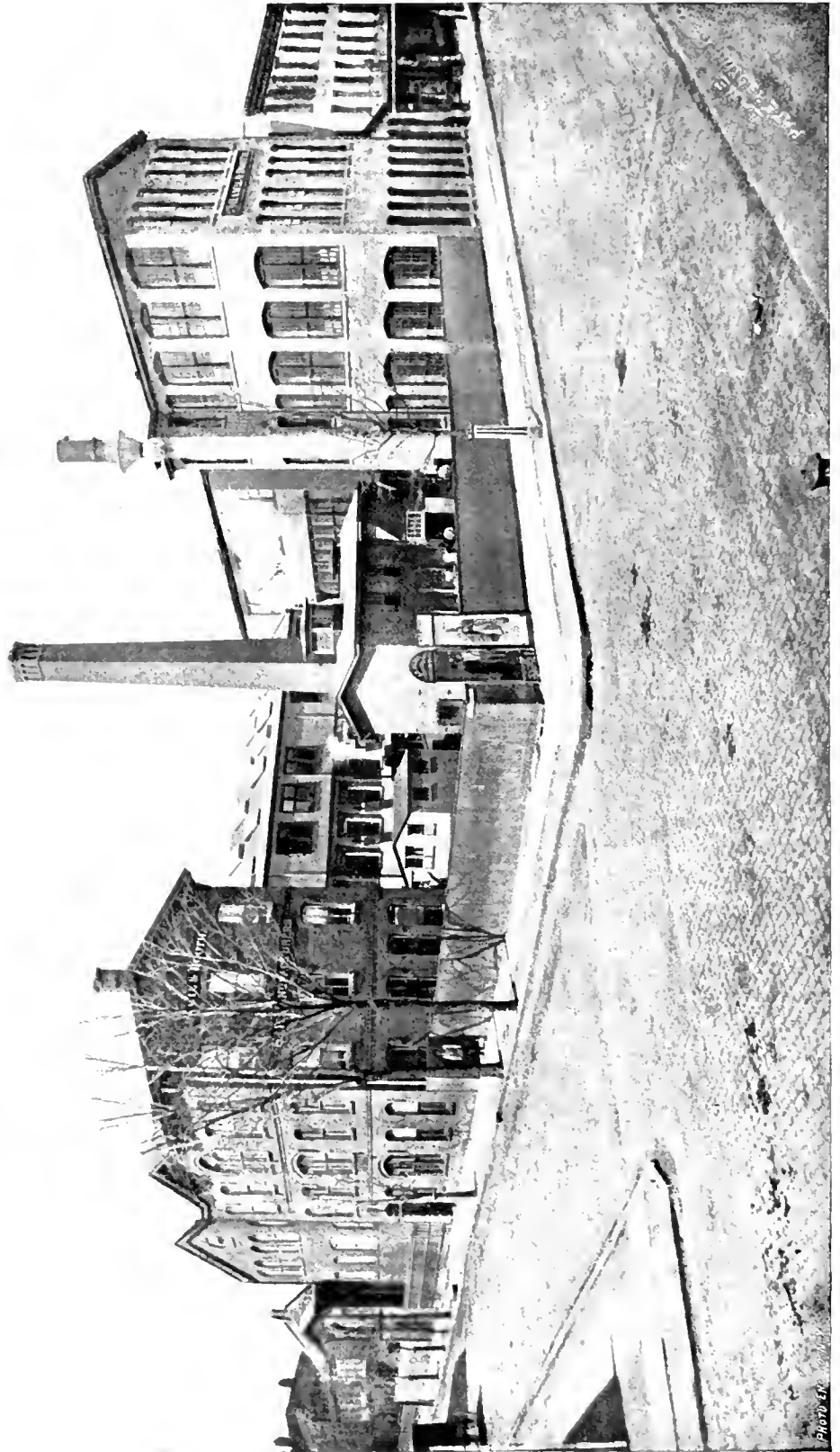
SILK MILL OF DOHERTY & WADSWORTH.



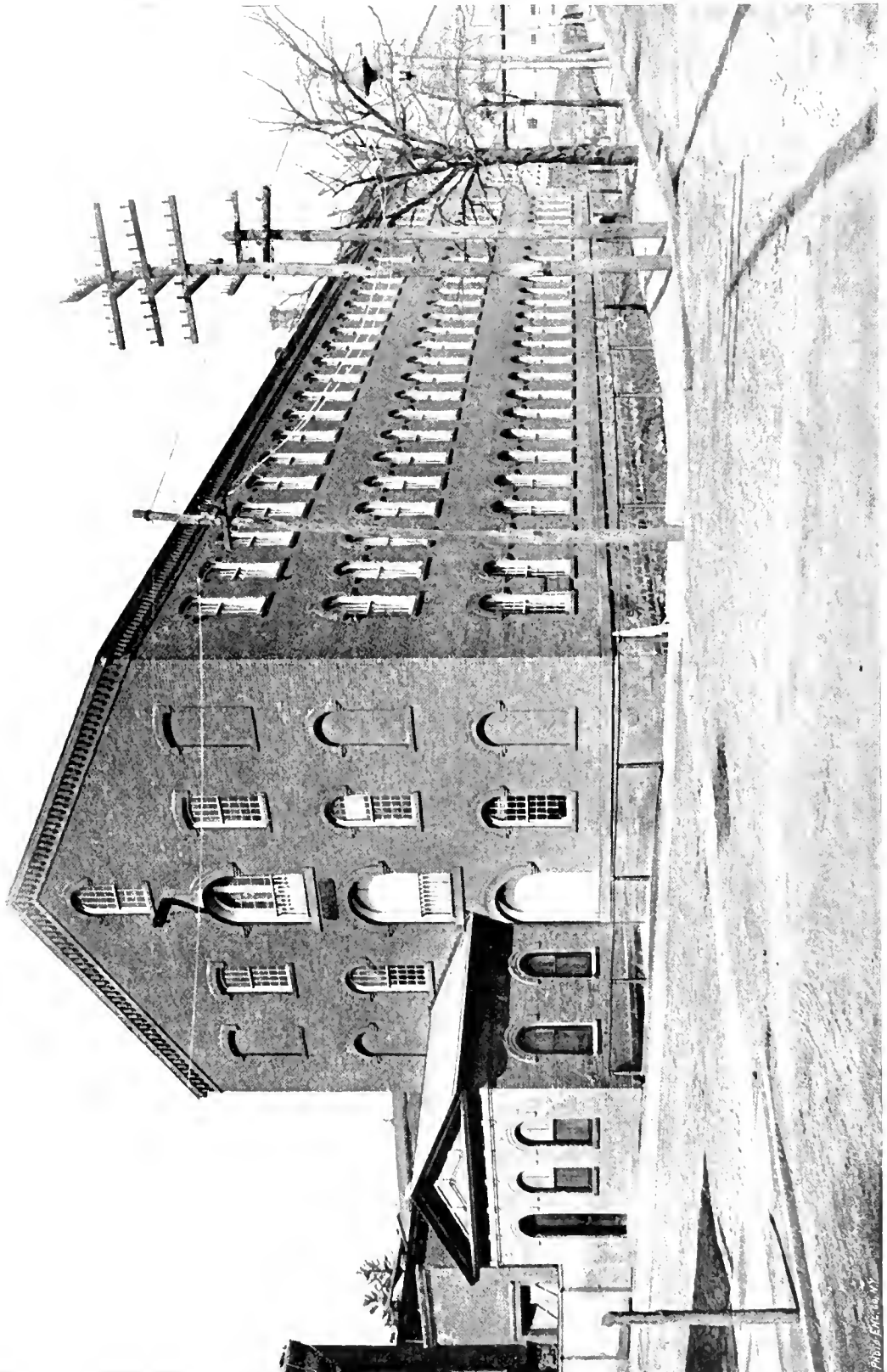
HENRY DOHERTY.



JOSEPH WADSWORTH.



SILK MILL OF HAMIL & BOOTH IN WARD STREET.



SILK MILL OF HAMIL & BOOTH IN MARKET STREET.



SILK MILL OF GRIMSHAW BROTHERS.

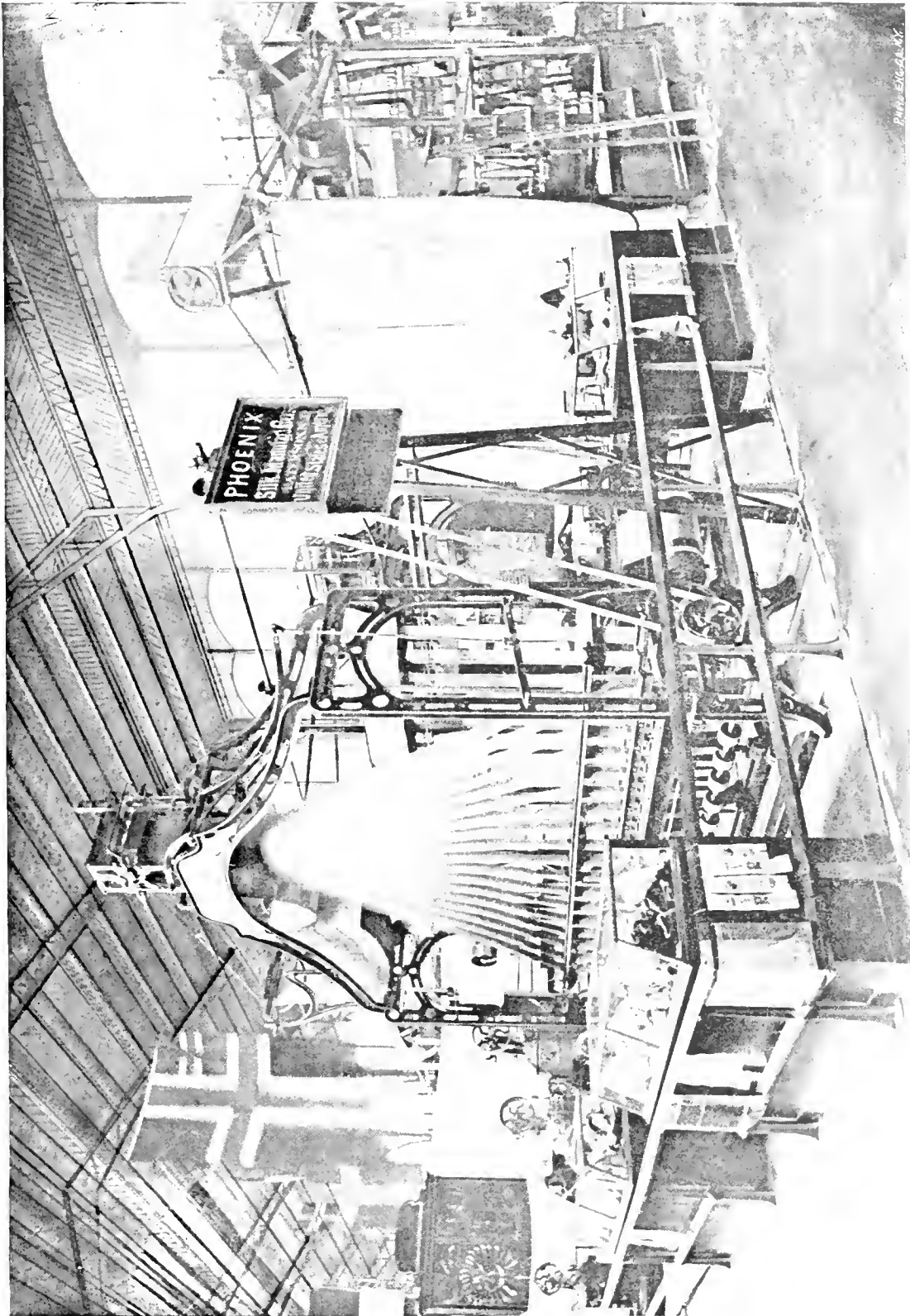
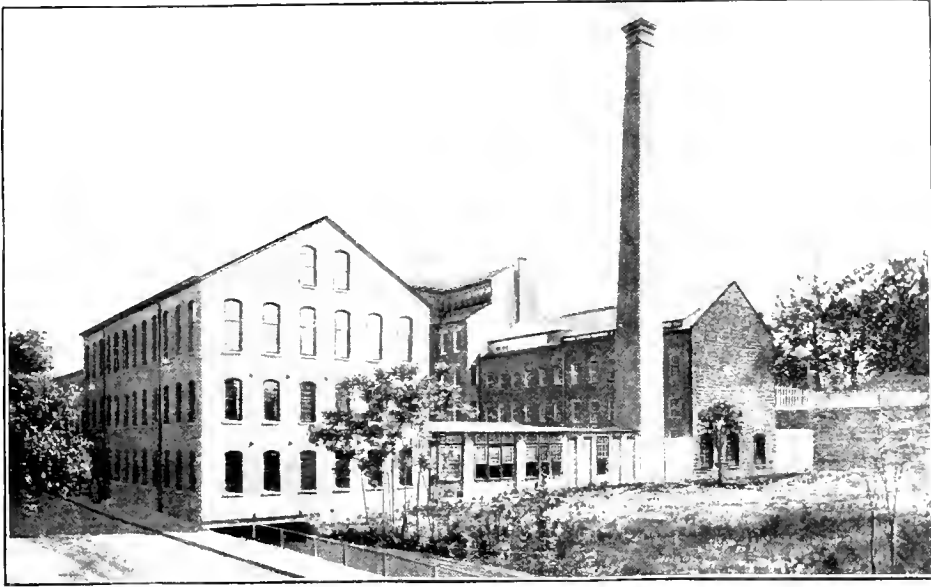


EXHIBIT OF THE PHOENIX SILK MANUFACTURING COMPANY AT THE PARIS EXHIBITION OF 1878.

Photo. E. G. & W. Co.



JOHN H. HOPPER.



SILK MILL OF HOPPER & SCOTT.



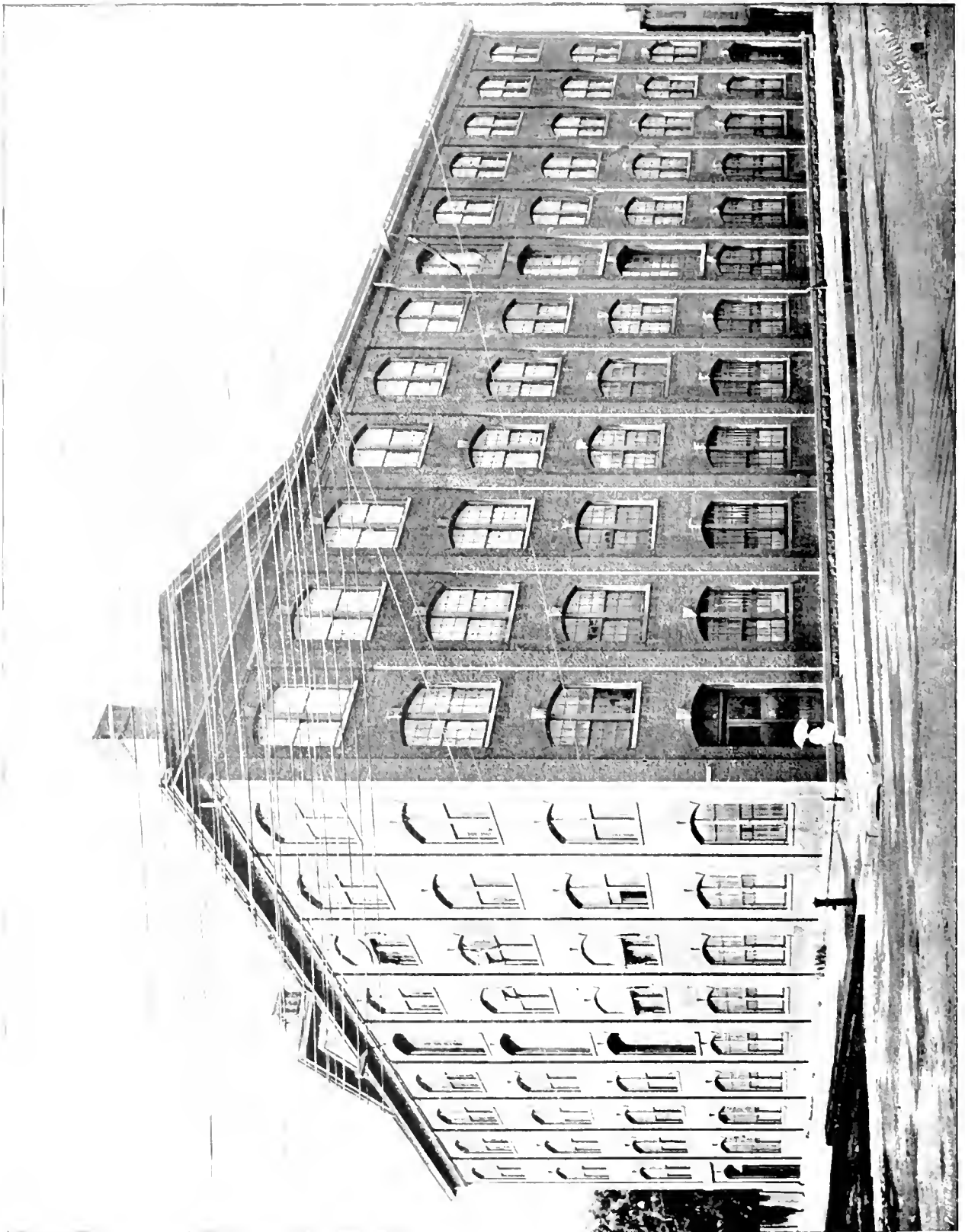
SILK MILL OF RAMSAY & GORE.



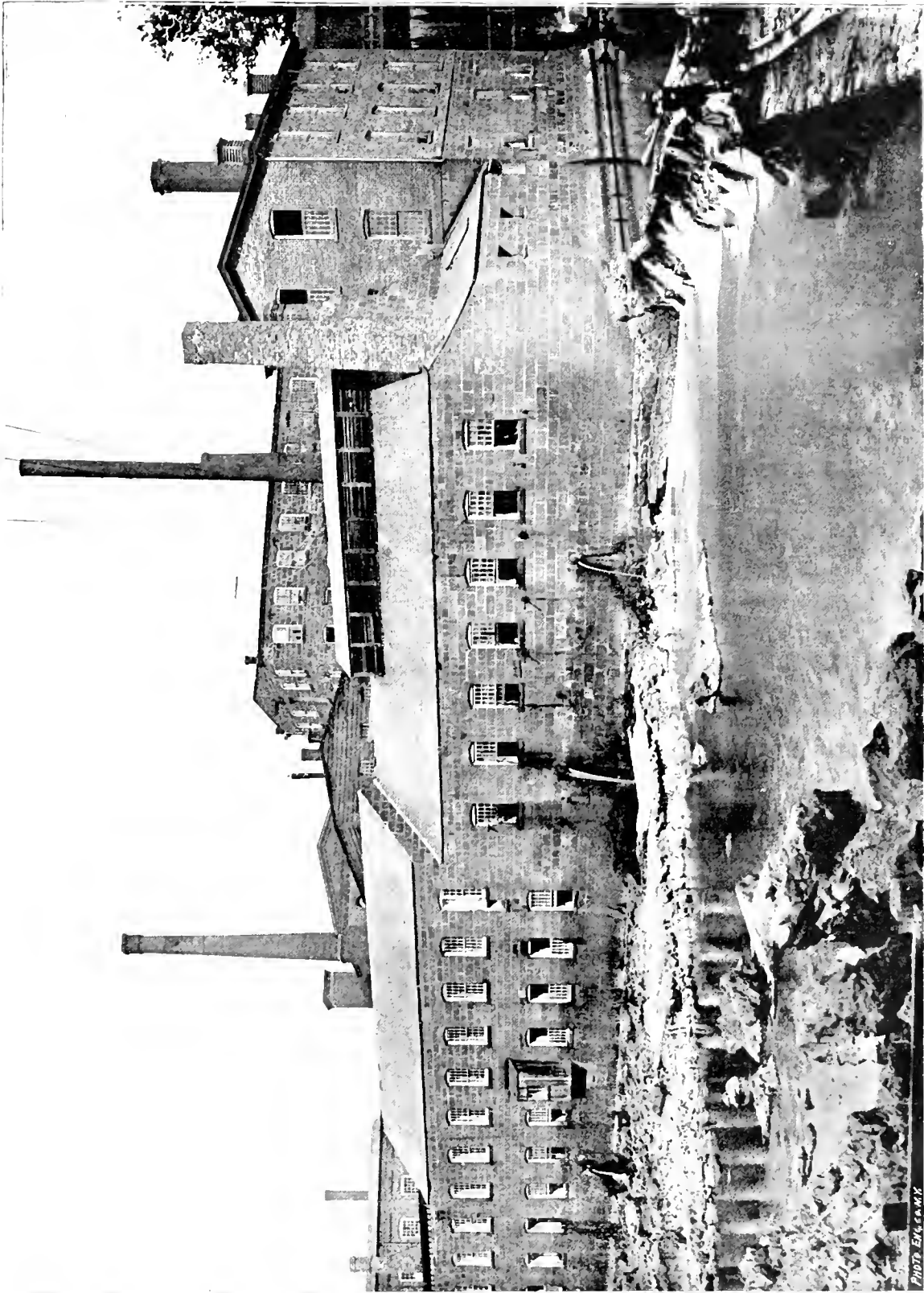
JOHN RAMSAY.



THOMAS E. GORE.

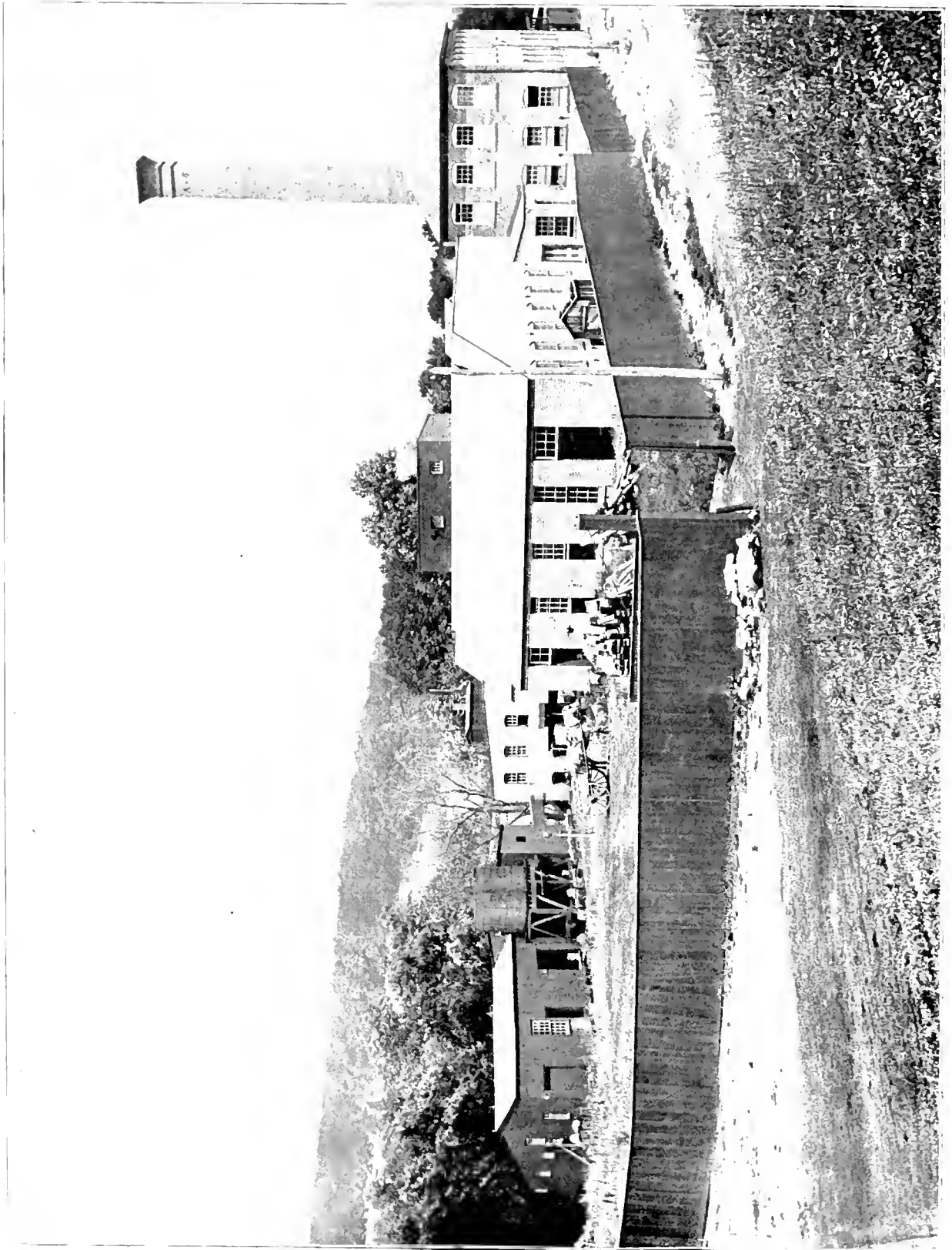


THE BARNERT SILK MILL.



SILK DYE WORKS OF KNIPSCHER & MAASS.

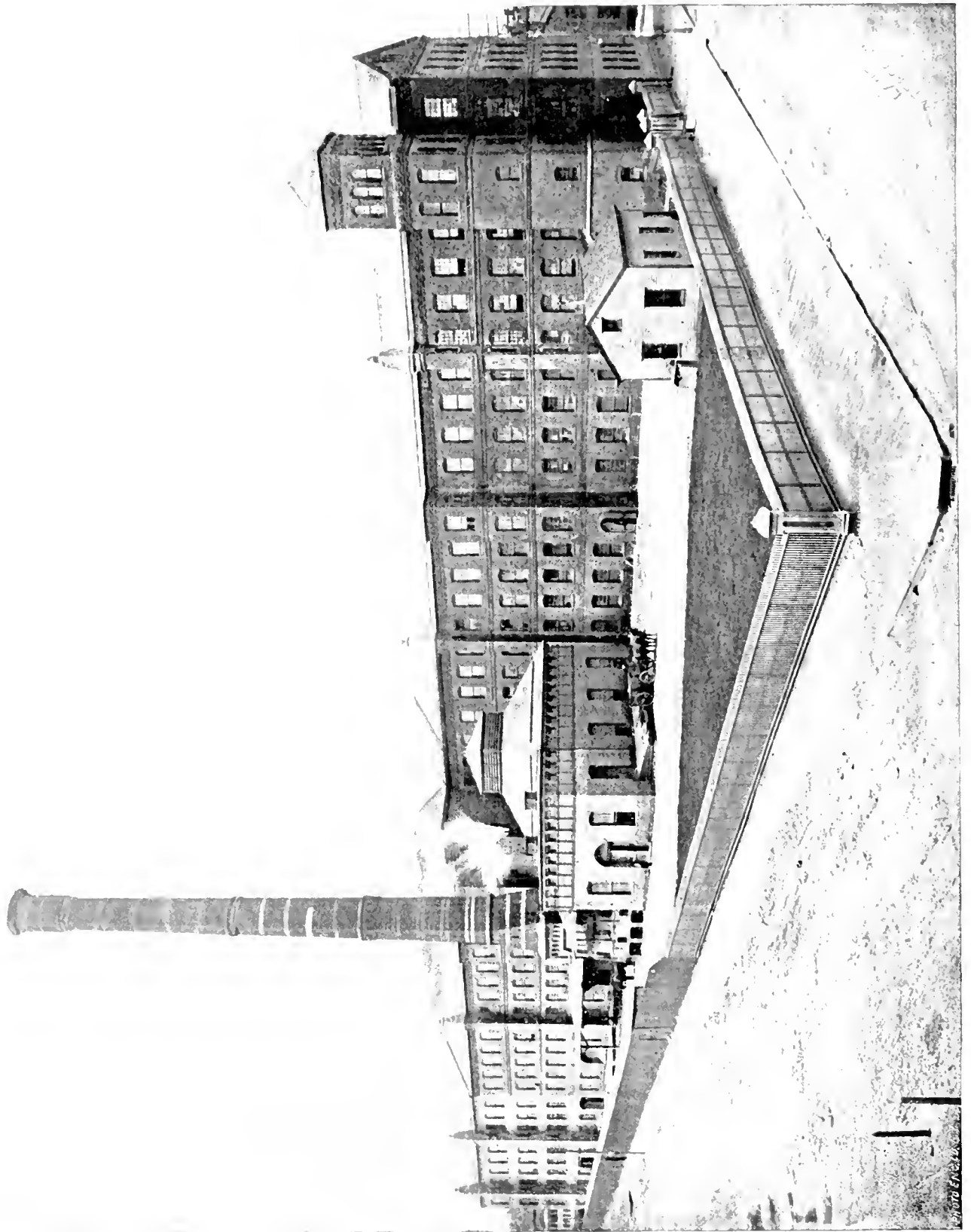
PHOTO. EM. S. A. N. Y.



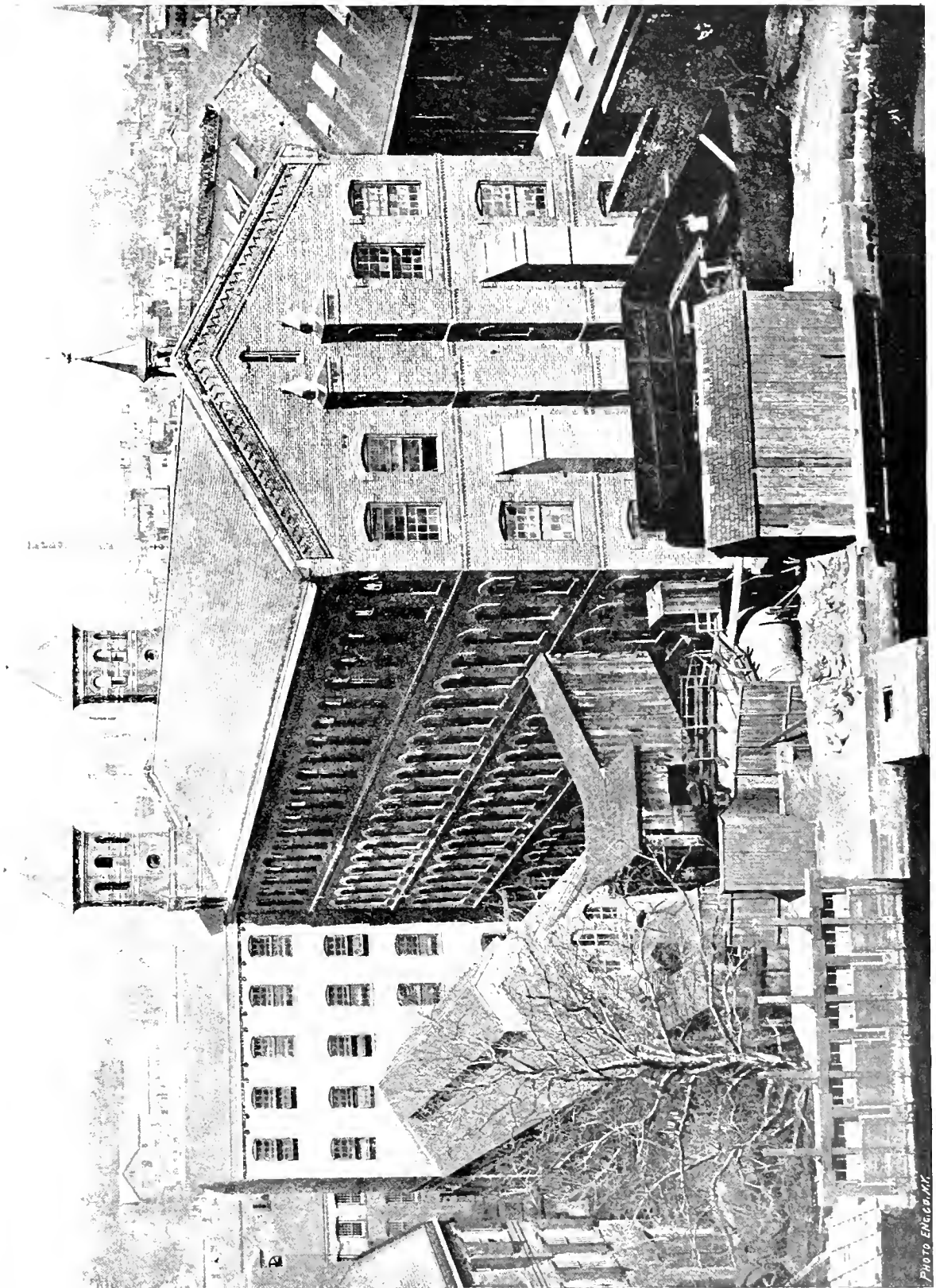
SILK DYE WORKS OF AUGER & SIMON.



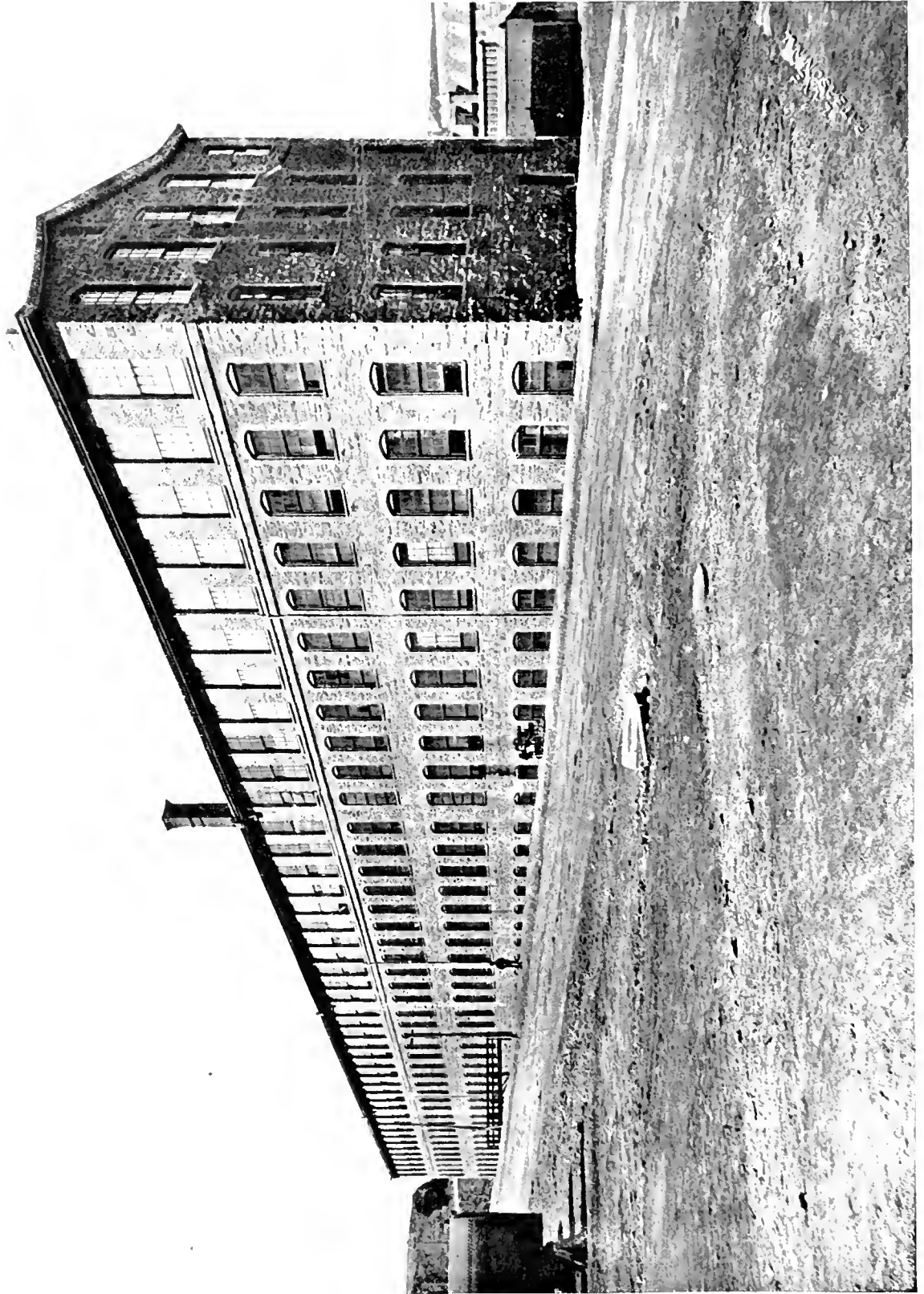
THOMAS BARBOUR.



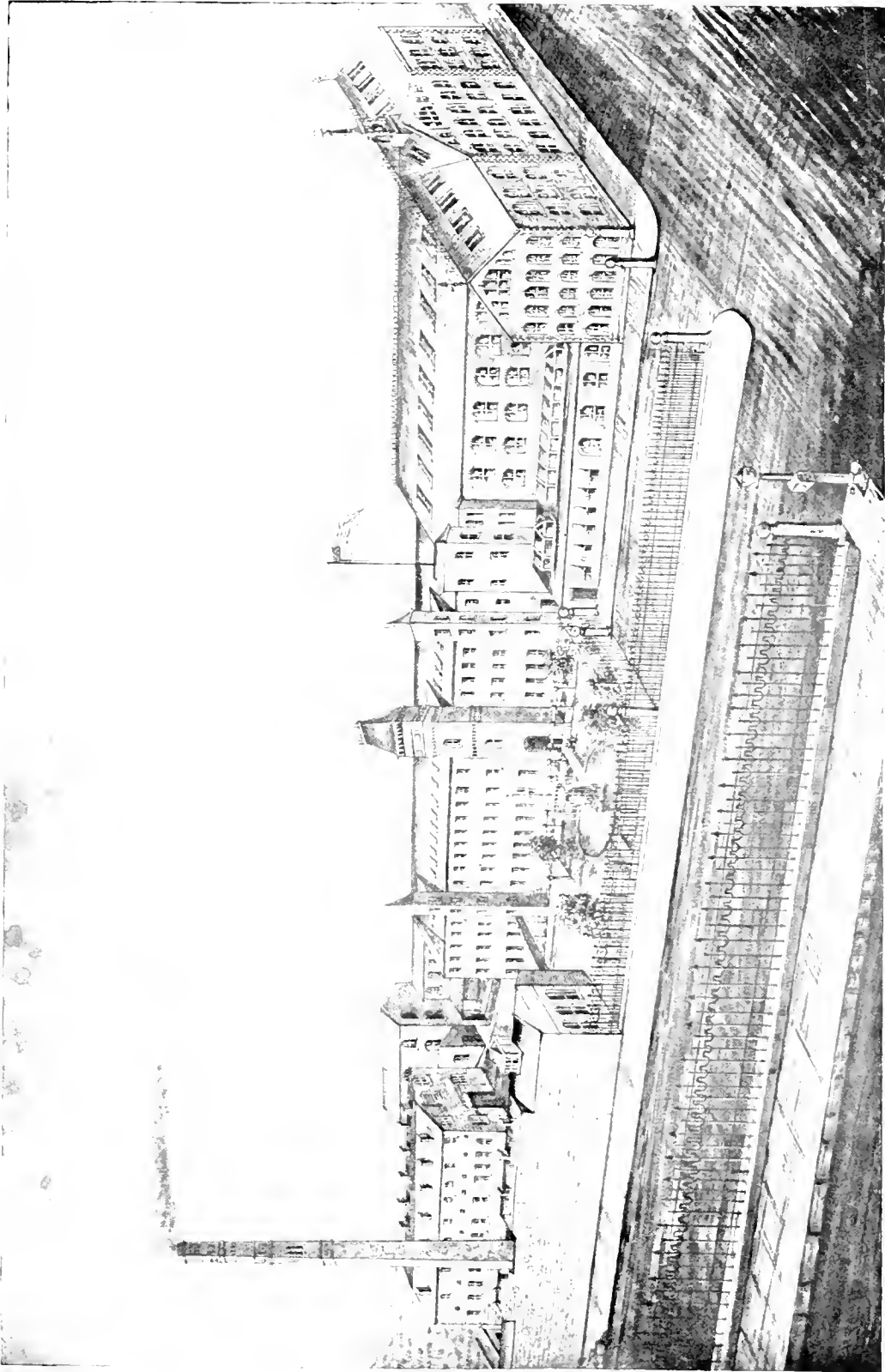
GRAND STREET MILL OF THE BARBOUR FLAX SPINNING COMPANY.



SPRUCE STREET MILL OF THE BARBOUR FLAX SPINNING COMPANY.



GRANITE MILL OF THE BARBOUR FLAX SPINNING COMPANY.



JUTE MILL OF THE DOLPHIN MANUFACTURING COMPANY.



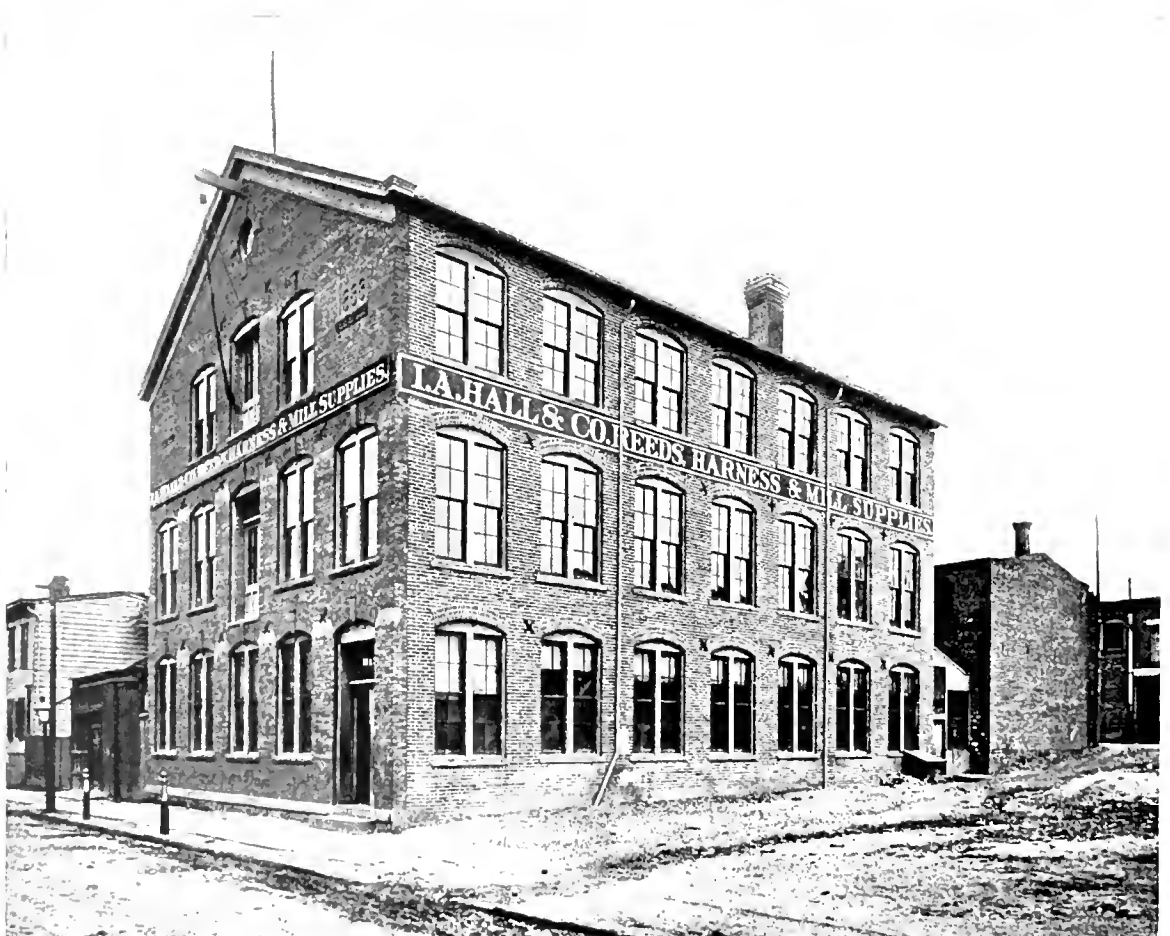
JACOB WALDER.



FREDERICK HARDING.



WORKS OF JOHN R. DAGGERS.



WORKS OF I. A. HALL.



JOHN R. DAGGERS.



I. A. HALL.



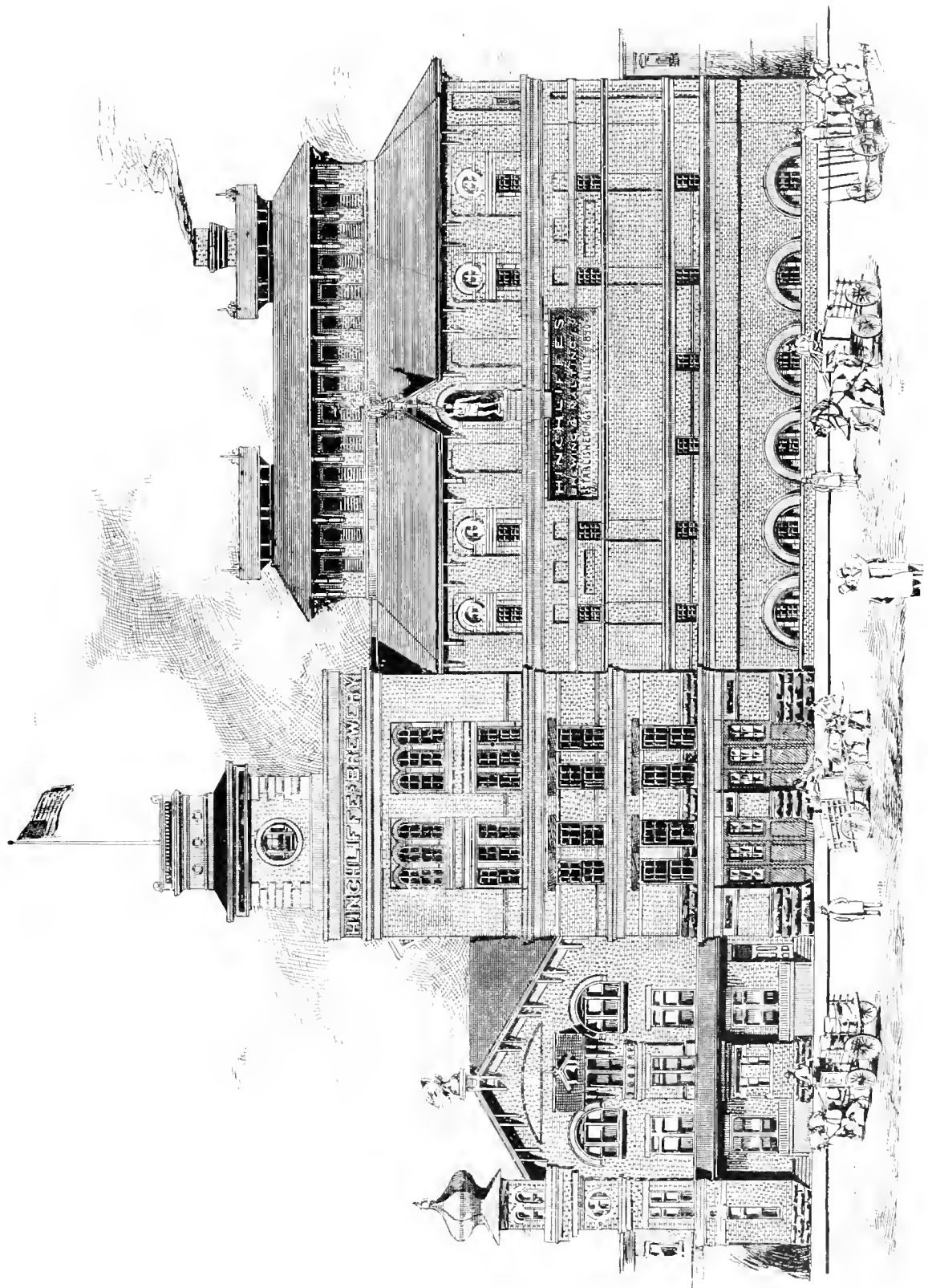
I. D. BLAUVELT.



CARRIAGE WORKS OF I. D. BLAUVELT.



MARBLE AND GRANITE WORKS OF WILLIAM L. BAMBER.



THE HINCHLIFFE BREWERY.

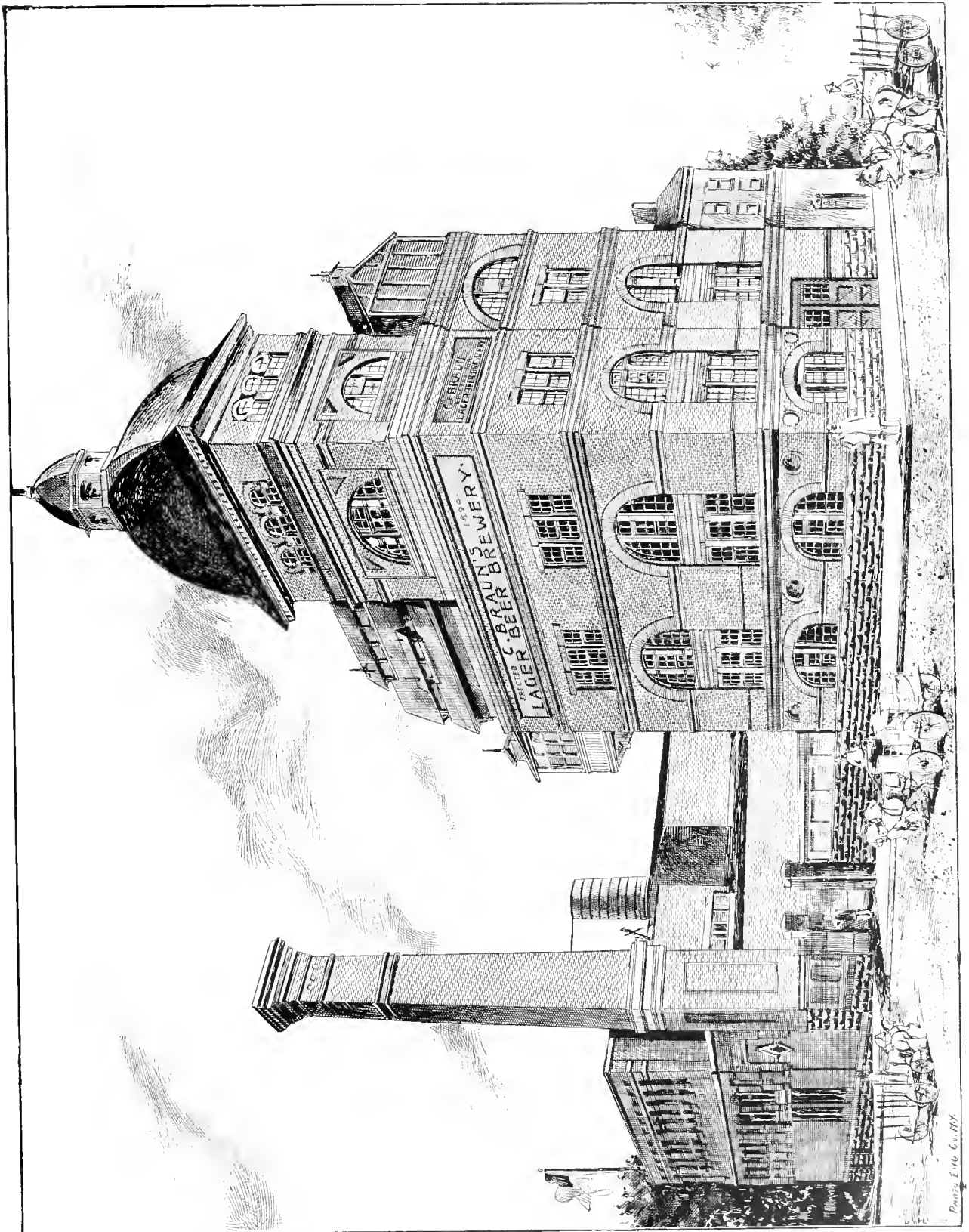


WILLIAM F. HINCHLIFFE
VICE-PRESIDENT.

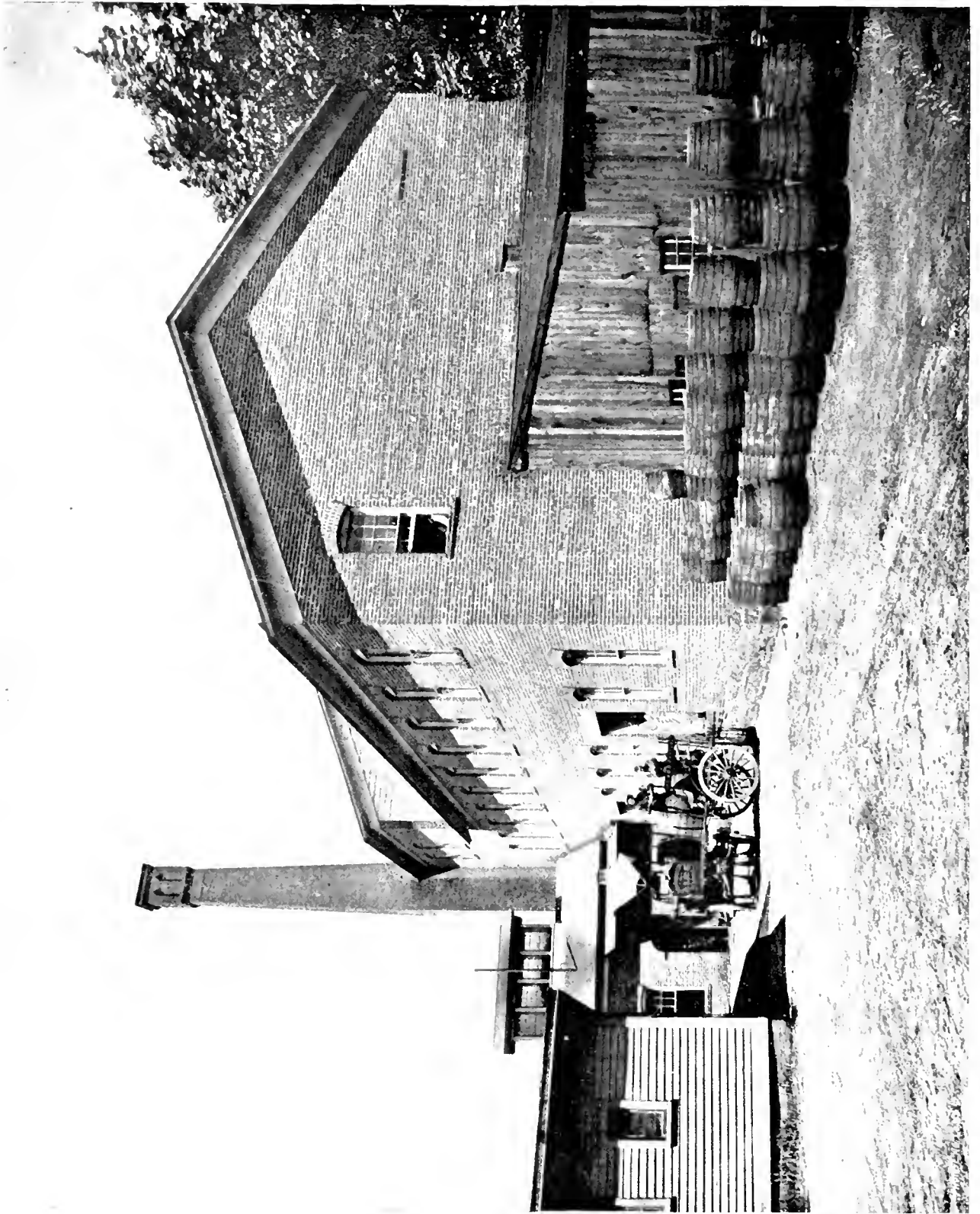
JOHN HINCHLIFFE,
PRESIDENT.

THE LATE JOHN HINCHLIFFE, FOUNDER.

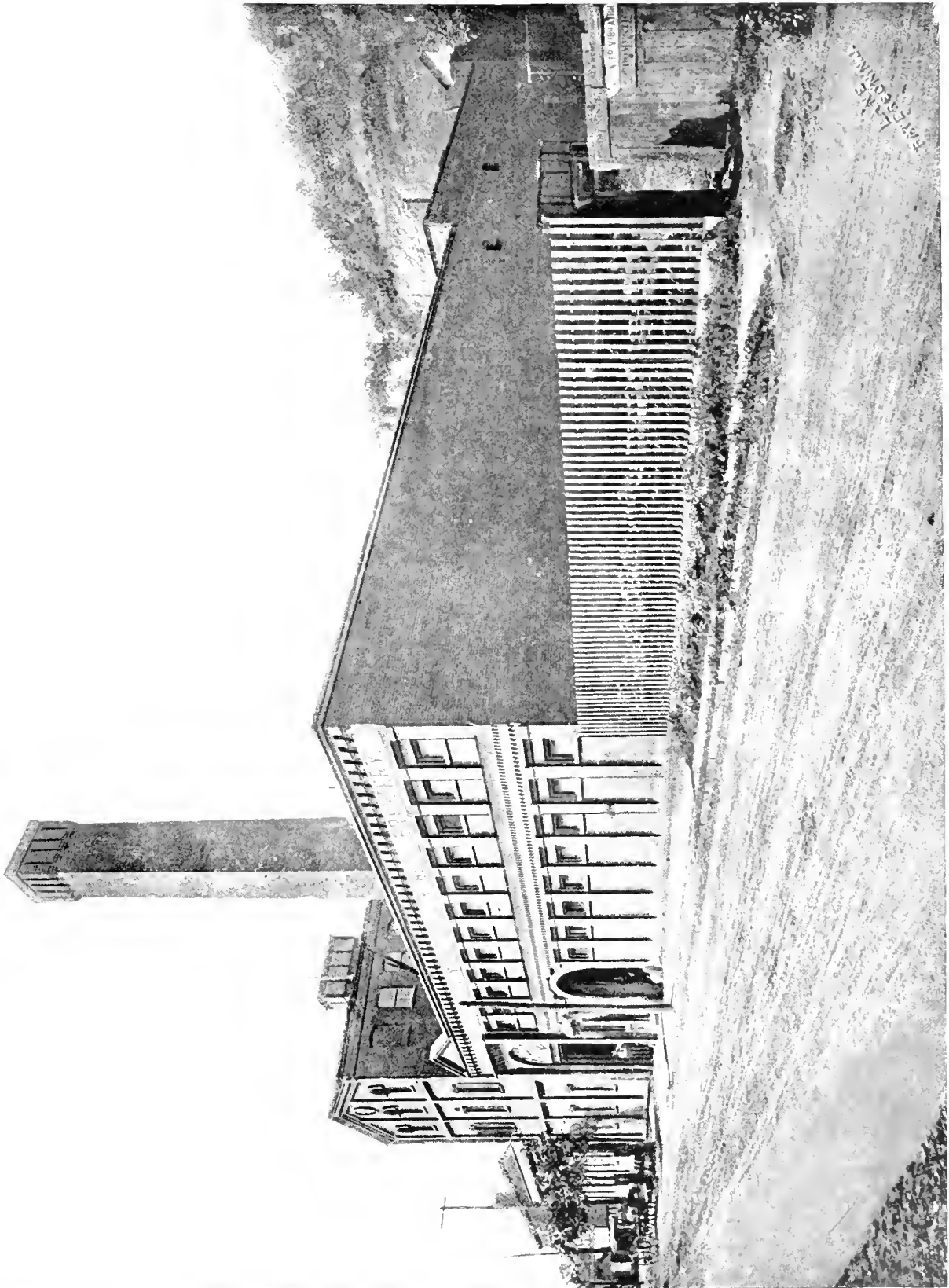
JAMES C. HINCHLIFFE,
SECY AND TREAS.



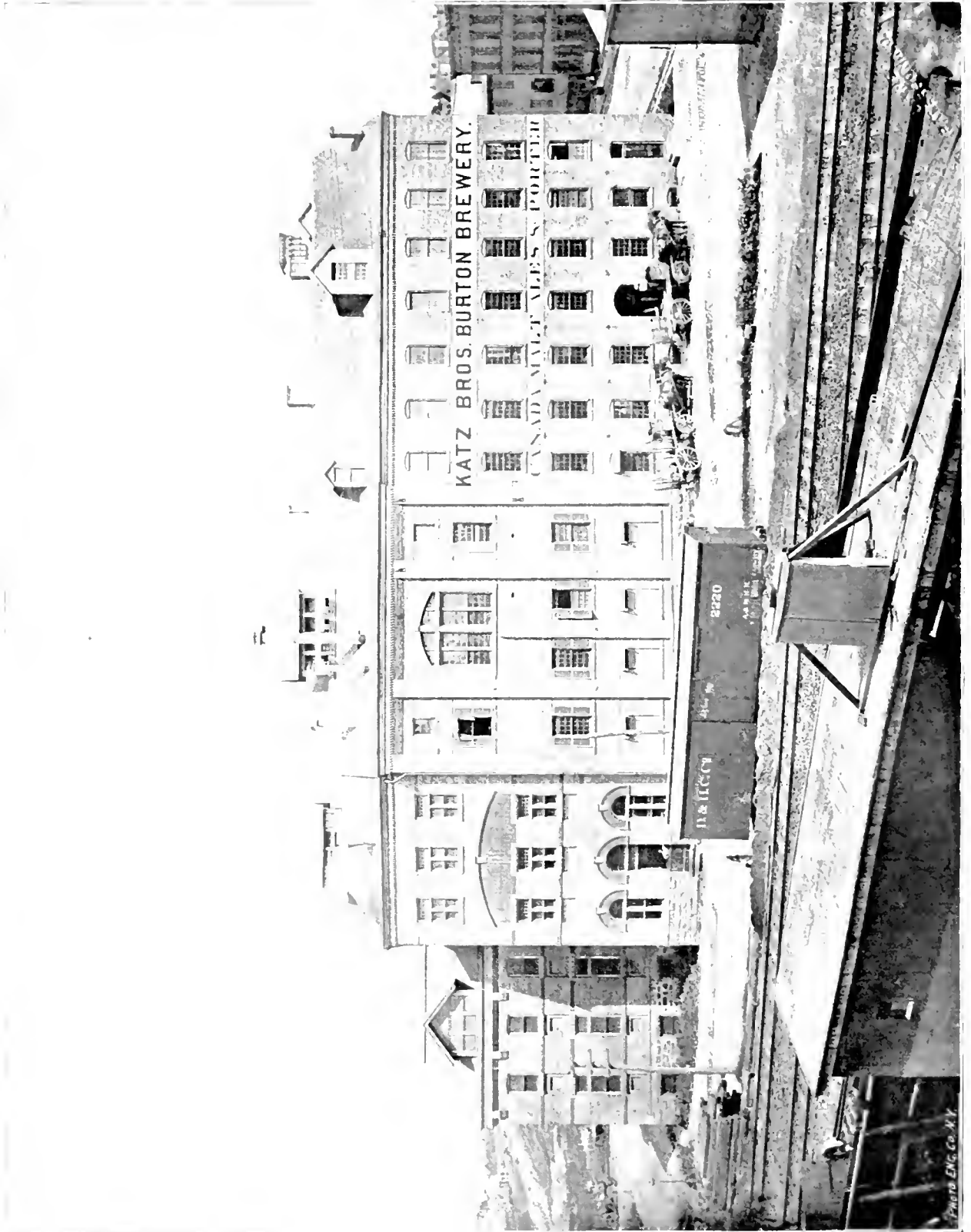
THE CONSOLIDATED BREWING COMPANY.—BREWERY OF CHRISTIAN BRAUN.



THE CONSOLIDATED BREWING COMPANY, BREWERY OF JAMES A. GRAHAM.




THE CONSOLIDATED BREWING COMPANY.—BREWERY OF SPRATTLE & MENNEL.



THE CONSOLIDATED BREWING COMPANY.—BREWERY OF KATZ BROTHERS.

Paterson's Industries.



TO give a detailed account of the various industries in Paterson would be equal to writing an encyclopedia; it would require a knowledge of nearly every branch of industry and the diligent research of the historian. This it is needless to say is not the object of this work. Mr. Fenner on preceding pages has pointed out that Paterson possesses advantages which have attracted hither many and important industries, all of which met with success. The purposes of this work will be amply answered by a description of some of the leading manufacturing establishments; to describe them all would be mere repetition tiresome to the reader. Paterson has many and diversified industries all of which contribute their share of proof that for manufacturing no place possesses advantages superior to Paterson. "The proof of the pudding is the eating thereof," is an old proverb and one which has stood the test of ages, thereby differing from many other proverbs. On the preceding pages of this volume the advantages of Paterson have been theoretically set forth with such proof as was incident thereto; the next succeeding pages will show more in detail what Paterson has accomplished, how its manufacturers have prospered and how others may do likewise. No attempt will be made to cover the entire field of industry but enough will be shown to support the claims of Paterson as an exceptionally well favored place for manufacturing.

THE ROGERS LOCOMOTIVE AND MACHINE WORKS.—The history of the Rogers locomotive works is so closely identified with the history of locomotive building in this country that the two cannot be considered apart from each other. No man ever did more for an industry in any country than did Mr. Thomas Rogers for the locomotive industry in the United States. His genius and energy laid the cornerstone for what is now one of the most important industries in the country.

It was not until 1833 that railroads began to attract considerable attention. The first railroad built here was a line about three miles long from the Quincy granite quarries to the Neponset river, the object being the transportation of granite for the Bunker Hill monument. This road was built in 1826 and was operated by horse power and stationary engines. The Delaware & Hudson Canal company built the Carbondale railroad in 1827; this line was also

operated by horses and stationary engines and extended from Carbondale, Pa., to Honesdale. It was the first railroad on which a locomotive was used. This locomotive was the "Stonbridge Lion," (Fig. 1, page 126), built in Stonbridge, England, under the direction of Horatio Allen, an engineer on the Carbondale road. It was tried in August, 1826, but found too heavy for the road. The second locomotive used in this country was built in England, (Fig. 2, page 126), by Stephenson. It was called the "Rocket" and was built for the Carbondale road. Peter Cooper then built a locomotive, (Fig. 3, page 126), which was used on the Baltimore & Ohio railroad. This was in 1830. In the same year E. L. Miller built a locomotive, (Fig. 4, page 126), called the "Best Friend," for the South Carolina railroad company. In 1831 the "South Carolina," (Fig. 5, page 126), was built by the West Point Foundry Association. The first locomotive built by the Rogers works was the "Sandusky," (Fig. 6, page 126) for the New Jersey Railroad and Transportation Company. The evolution of the locomotive from the first one used in this country to the finished product of the Rogers works of to-day, is shown on pages 126 and 127.

Mr. Thomas Rogers was born on March 16, 1792, in Groton, Conn. He died in New York on April 19, 1856. He was a lineal descendant of Thomas Rogers, one of the Pilgrim Fathers, who came to this country in the historic Mayflower. Early in his life he learned the trade of house carpenter but at the breaking out of the war of 1812 he enlisted. After serving through the war he worked at his trade as carpenter in Paterson. While thus employed he was engaged by Captain Ward, who had recently returned from a trip to England, to make the patterns for a number of power looms to be used in the manufacture of cotton duck. He appreciated the value of the power looms and bought from Captain Ward the patent for manufacturing them. In 1816 he went into partnership with John Clark, Jr., whose father had recently erected the Beaver mill, and engaged in the manufacture of power looms. In the following year the firm moved into the little Beaver mill and Abraham Godwin, Jr., was admitted as a partner, the name of the firm being changed to Godwin, Rogers & Co. The firm spun cotton and built all kinds of machinery. In 1822 they leased Collett's mill, employing at that time about two hundred hands. In June, 1831, Mr. Rogers withdrew from the firm, taking with him \$38,000 as his share of the profits. He purchased a mill site on the up-

per raceway and erected the Jefferson Works in what was at that time a part of the forest surrounding Paterson. Mr. Rogers intended to devote the lower part of the mill to building machinery and the upper to spinning cotton, but he soon found orders pouring in for machinery to such an extent that he abandoned the spinning of cotton and devoted himself exclusively to the construction of machinery. In 1832 he went into partnership with Morris Ketchum and Jasper Grosvenor, of New York, under the firm name of Rogers, Ketchum & Grosvenor. The railroad from Jersey City to Paterson was approaching completion and the firm built the bridges along the line of that road. Horatio Allen was then chief engineer of the South Carolina railroad and he visited Mr. Rogers on an order for a number of axles and carwheels and had a conversation with him on the subject of building locomotives. The "McNeill," the first locomotive on the Paterson & Hudson River railroad, had been brought to Paterson. The firm had erected a two-story stone structure, about 50 by 75 feet, at the southeast corner of Market and Spruce streets, for a millwright shop. In the fall of 1830 a two-story brick building, 40x100 feet, was erected on the east side of Spruce street, nearly opposite the present office, for a locomotive shop. When the "McNeill" was brought to Paterson it lay for some weeks in pieces, just as it had been brought from England, and nobody was at hand to put it together. This gave Mr. Rogers an excellent opportunity to study its construction, which he was not slow to take advantage of. One Hodge, a draughtsman of considerable skill, was employed to make drawings for an engine of the same model as the "McNeill." He worked at them for a long time but the engine made slow progress and Mr. Rogers finally discharged him. Then Mr. William Swinburne, who was the patternmaker for the works, proposed to make the drawings and the patterns for the engine. His offer was gladly accepted and he went confidently to work, preparing the drawings and patterns and superintending the construction. It was a daring experiment but after much trying and more than a year of hard work the new engine was completed to the satisfaction of all concerned. It was called the "Sandusky." It had one pair of driving wheels, situated forward of the furnace; they were $1\frac{1}{2}$ feet in diameter; the cylinders were 14 inches in diameter, by 10 inches stroke; the truck had four 30 inch wheels. The little engine was about the size of those now run on the New York elevated railroads. It was in some respects an improvement on its model, Mr. Rogers having introduced a novel feature, "counterbalancing," since adopted in most locomotive engines. For this he filed a specification in the Patent Office, dated July 12, 1837. He also cast the driving wheels with hollow spokes and rim and in other particulars anticipated the driving wheel now in general use on the railroads of this country. He also set the four wheeled truck under the forward part of the engine. The "Sandusky" made a public trial trip on October 6, 1837, running from Paterson to Jersey City and thence to New

Brunswick and back, the trip being entirely satisfactory to all concerned. It was designed for the New Jersey (now Pennsylvania) railroad, but was sold to the Mad River & Lake Erie railroad company and shipped on October 14; the price was \$6,750. There was no railroad west of Paterson, so the engine was taken to pieces, boxed up and sent by schooner and canal-boat to Ohio, in charge of Thomas Hogg, an employe of the Rogers works, who had been occupied on the engine from the first. He put it together at the place of its destination and as soon as the track was laid—which was required by the legislature to be four feet ten inches gauge to conform to the gauge of the locomotive—he ran the new iron horse for a short time to show the railroad men how to do it. The result was that he was retained in the employ of the railroad company, of which he was master mechanic for thirty years. The second engine produced at the Rogers works was the "Arresech," for the New Jersey railroad. It was shipped February 19, 1838, and was similar to the first. The "Clinton" was completed in April, 1838, for the Lockport & Niagara Falls railroad; its cylinders were 16 by 18 and its gauge was 4 feet 8 $\frac{1}{2}$ inches. The "Experiment" was turned out in June for the South Carolina railroad. In October three were finished and in November only two. Thus it will be seen that whereas it took eighteen months to make the first engine, seven were completed in the next year. An eight-wheel engine was turned out in 1841, a ten-wheel engine in 1848 and the first "Mogul" was made at these works in 1863, since which date it has become popular with all the great railroads. It would take many pages to enumerate all the improvements in the construction of locomotives which have been originated at these works. Mr. Rogers was himself a man of great quickness of perception and was always ready to act on the suggestions of others as well, and from the first had the best available talent, including the men who subsequently started the locomotive business elsewhere in the city. For thirty years the establishment had the advantage of the talents of William S. Hudson, who was acknowledged to be one of the foremost men in the United States, if not in the world, as a locomotive mechanic. The fame of the engines spread wide at an early day. In 1841 a locomotive was sent to Cuba and that led the way to a constant succession of orders thence since that time, so that to-day most of the locomotives running in Cuba are from the Rogers works. Orders soon poured in from all parts of the country and building after building was erected until there was a mass of structures of all shapes and sizes. They were mostly small, ancient and unattractive in aspect, with low ceilings, badly arranged and badly located with respect to convenience in getting work. It was evident at a glance that they had been put up and enlarged from time to time to meet the urgent demands of the moment and without any idea of the future magnitude the business was destined to attain. This had gone on until it became impossible to continue in that way. Then Mr. Jacob S. Rogers, who had succeeded his father in the

management of the works and who displayed the same indomitable energy and business tact, began the reconstruction, steadily pursuing a settled and most far-seeing plan, looking to the indefinite expansion of the works and adapting every department of the works to every other department, with a view to the utmost economy in time, labor and space. These, however, were not the only considerations. The comfort and convenience of the workmen were regarded at the same time, and the new buildings had high ceilings, abundant light and air, and in winter were comfortably warmed. Moreover, some attention was paid to the architectural appearance of the new structures, which are therefore symmetrical and pleasing to the eye and an ornament to the vicinity. There is a massive simplicity about all of them, of course, which befits the character of the establishment, but there is nothing repellant about them, either inside or outside. Since 1870 the building of machinery, originally the sole business of the works, has been abandoned to make way for the production of locomotives.

The evolution of the Rogers works in 1832 to their present dimensions is shown on page 124. The works at present are owned by the Rogers Locomotive and Machine Works, of which Mr. Jacob S. Rogers, the son of Thomas Rogers, is president, and Mr. Robert S. Hughes, is secretary. The establishment employs about two thousand hands.

Illustrations of locomotives built during the present year by the Rogers Locomotive Works will be found on page 127. Figure 1 represents a passenger locomotive, having the following dimensions: Cylinders, 17x24; gauge, 4 feet, 8½ inches; driving wheels, 62 inches; rigid wheel base, 8 feet, 6 inches; total wheel base, 22 feet, 9½ inches; the engine weighs in working order 80,000 pounds, on drivers, 56,000 pounds. Figure 2 represents another passenger engine, having the following dimensions:—Cylinders, 20x24; gauge, 4, 8½; driving wheels, 62; rigid wheel base, 13; total wheel base, 23, 0; the engine weighs in working order 131,000; on drivers 100,500. Figure 3 represents a large freight engine, having dimensions as follows:—Cylinders, 20x24; gauge, 4, 9; driving wheels, 4, 3; rigid wheel base, 15, 8; total wheel base, 23, 5; the engine weighs 131,000 in working order; 112,000 on drivers.

ROBERT S. HUGHES was born in this city on the 24th of May, 1827, his father being Robert Hughes, one of the oldest residents of the city. At twenty years of age Mr. Hughes entered the employment of Rogers, Ketchum & Grosvenor as an assistant in the office and since that time he has been associated with the Messrs. Rogers in their manufacturing enterprises. During that period the most important changes have been made in the building of locomotives. When the Rogers Locomotive & Machine Company was formed Mr. Hughes was given an interest in the enterprise. In 1866 he was elected secretary of the company and ten years later he was elected treasurer. A recent writer very properly says of Mr. Hughes:—"His life-

work has been confined to the performance of his duties in the office of the Rogers works, and he has held himself studiously aloof from all public affairs, although he has always felt a warm interest in local events and been a willing contributor to the institutions of the city. He is courteous and kind in his intercourse with all and his modesty and reticence do not conceal from his friends his real worth as a man and a citizen. He possesses good business qualifications and during the many years of his connection with the Rogers works has been uniformly faithful in the discharge of all duties and his services have been highly valued by the concern."

THE PASSAIC ROLLING MILL.—The Passaic Rolling Mill is one of the most important iron manufacturing establishments in the country and it was part of the good fortune which has made Paterson so flourishing that induced the owners of this establishment to locate their industry within its limits. The establishment is one of the main props of industrial Paterson, for no matter what the state of business may be generally there is always work to do at the Passaic Rolling Mill. It occupies a large territory with numerous large buildings in the southern part of the city and forcibly impresses passengers on Erie trains with the importance of Paterson as a manufacturing centre.

The first indication of activity in this portion of the city was in 1863, when Mr. Sherman Jaqua had obtained for himself and a few others a charter from the legislature for the Paterson Iron Company. A frame shop, one hundred by two hundred feet, was built and the rolling of merchant bar iron from scrap begun. In the following year the name of the company was changed to the Idaho Iron Company. The industry, however, did not flourish and in the course of a year or two the plant was sold to a company in California and shipped thither. In 1867, after the shop had been closed for two years, Mr. Watts Cooke came to Paterson, whither his three brothers, John, James and William, had preceded him. Mr. Watts Cooke had been superintendent of the Delaware, Lackawanna & Western railroad for a number of years, a position which had enabled him to study the rolling of iron in the large establishments along the line of that road. In March, 1868, the four brothers bought the remaining property of the Idaho Iron Works and at once proceeded to put in new machinery. So energetic were the preparations that the new company rolled its first bar of iron on July 3, 1868, they having at that time two trains of rolls, eighteen-inch and nine-inch, and employing about a hundred hands. In the following year the company was chartered as the Passaic Rolling Mill Company; it had a capital of \$100,000, with a privilege of increasing it to \$500,000. In 1873 Mr. William Cooke, who had been President, sold his interest to Mr. W. O. Fayerweather and since then the management of the business has rested upon Mr. Watts Cooke as President and Mr. Fayerweather as Treasurer.

The financial panic of 1873, which closed so many of the industrial establishments in this country, only effected a change in the product of the works. There being little

demand for the kind of work hitherto produced a new 22-inch train of rolls was put in for the rolling of I beams and channel iron. The success of what appeared at the time an experiment attested the good judgment of the company. The first order received was for the iron work for the new building of the New York Evening Post, on the corner of Broadway and Fulton street, New York; this was followed by a large order for iron work for the new Capitol at Albany and then came an order for all the iron beams used in the construction of the Centennial buildings in Philadelphia. From this time on orders poured in from all sources. One of the most striking buildings erected was the Seventh Regiment Armory of New York. This consists in the main of a series of immense arches of iron, 187 feet span over all, the building being 200 feet long and 91 feet high; there are 1,150,000 pounds of iron in this enormous structure.

The building of wrought-iron bridges next attracted the attention of the company, one of the first orders being the bridge which spans the Passaic river at Riverside, Paterson, one of the cheapest and best bridges ever erected for the Erie railroad. One of the most important enterprises undertaken in structural iron was the construction of the New York elevated railroads. The company first built a section of the road from Morris street across the Battery to Front street, being the first of the modern system now in use on that line. Then the company built the section of the road from Morris street to Chatham Square. Then they took down the old track on the west side and rebuilt the road on their own plans from the Battery to Morris street, from Morris street through Greenwich to Central Park and all through Ninth avenue. On the east side they built the road from the Battery to Canal street and from Sixty-fifth to One-hundredth street. They used upwards of twelve thousand tons of iron in this work. On October 5, 1878, fire destroyed the puddling and merchant bar mills. These two buildings were three times as extensive as the whole establishment when the company took possession. The company at once replaced the burned structures with a fine brick building, two hundred by three hundred feet, with a lofty roof supported on iron trusses rolled in the mill. This was intended for puddling and for rolling merchant iron and small angles and T's. The works are kept running day and night.

In 1882 the company acquired what was known as the Vreeland farm, a tract of twenty-five acres adjoining their establishment on the south, it being apparent that the limited room would not be sufficient for the demand on the product. In that year Mr. John Cooke and Mr. James Cooke died and Messrs. John S. Cooke, Frederick W. Cooke and John K. Cooke were made directors. The work of the bridge building department had increased enormously and soon railroad bridges were built and shipped to every state in the Union, as well as to Central and South America and the West Indies. For many years these bridges were designed by Mr. Frank A. Leers, the civil engineer of the company, whose death in 1890 was a

great loss to the industry. Among the many notable works designed and executed since 1882 are the following:—The draw bridge over the Mississippi river at St. Paul, Minn., 132 feet span, up to that time the largest ever built; the Hoboken elevated cable railroad, over ninety feet high; the many bridges between Binghamton and Butlido on the Delaware, Lackawanna & Western railroad; the High Bridge over the Passaic river at West Paterson on the same road, and most notable of all the magnificent Washington Bridge over the Harlem river at One-hundred-and-eighty-first street, New York. This latter structure consists of two steel arches of five hundred and ten feet span each, requiring over 16,000,000 pounds of iron and steel in its construction. The work was built at the shops in Paterson and erected by the company in the space of fifteen months and is a triumph not only of engineering skill but a "thing of beauty" and a lasting monument to the credit of the works and the city of Paterson. An illustration of this bridge appears on page 129 of this work.

The substitution of steel for iron caused large additions to be made to the plant in 1888 and 1889. Open hearth steel furnaces were built, a universal plate mill, a blooming mill and a new beam mill. For the purpose of accommodating these, large additions were made to the buildings. The next step of importance was the construction of a spur of the Delaware, Lackawanna & Western railroad directly into the yards of the company. This enabled the company to receive at reduced cost the large tonnage of raw material such as coal, ore and pig iron, which before had to be hauled by teams nearly a mile.

The manufacture of steel was commenced in December, 1886, and has been in successful operation since. At present the pay-rolls of the company embrace over a thousand employees at the works proper, in addition to several hundred employed about the country erecting the various bridges under contract. And so it keeps on, growing larger year by year, so that if the future can be judged by the past before another ten years have gone by the additional twenty-five acres will be all under cover and the enormous works of the old world will find their counterpart in this newer and younger but more progressive country. The present management of the company is:—Watts Cooke, president; W. O. Fayerweather, vice president and treasurer; A. C. Fairchild, secretary; John K. Cooke, superintendent, with an able corps of assistants in the various departments.

THE PATERSON IRON WORKS.—The Paterson Iron Works were established in 1852 by Sherman Jappa, of Nashua, N. H., and Thomas W. Gillies, also of Nashua, where both these gentlemen were engaged in the manufacture of iron. They were attracted to Paterson by the expansion of the locomotive industry and the fact that some portions of locomotive engines were being made by contract by other iron manufacturers. They erected a blacksmith shop about fifty by seventy-five feet along the Erie railroad track, south of Clay street, and their first work was

the making of tires for locomotive wheels out of Lowmoor and Bolling bars. Subsequently they put in two hammers for the forging of axles and shapes for locomotives. The demand for their product induced them to put in another hammer shortly afterwards. In 1853 they obtained a special charter from the legislature and were constituted the Paterson Iron Works. Mr. Franklin C. Beckwith had at that time come to Paterson for the purpose of constructing the second track for the Erie railroad. Before the end of 1853 he had purchased a controlling interest in the works and had devoted himself altogether to the business of making forgings. Subsequently he bought out his partners and continued managing the works up to the time of his death. In 1866 he added the making of steel to the works but this industry gradually fell off and was given up altogether in 1870. In 1860 Mr. Beckwith had materially increased the capacity of the works: he disposed of the small hammers, putting in their places larger hammers of more approved construction. In 1862 he put in the first upright hammer, of five tons, for heavy steamship forgings. In 1865 he put in a ten-ton hammer. Orders soon poured in from all over the country and some of the heaviest forgings in use in water works and similar establishments throughout the United States were made by the Paterson Iron Works. A number of immense shafts were forged for the Pacific Mail steamship company and were sent overland by rail to California, there to be placed in the steamships of that company. As there are few works in the country with the capacity of the Paterson Iron Works they have frequent calls for machinery from remote parts of the country. They have furnished large plants for mining operations in the west and in this, as in other branches, they have achieved enviable success. The works cover a large area of ground and employ about two hundred hands. At the death of Mr. Beckwith the works passed into the hands of his sons, Charles D. and J. Alexander Beckwith; the latter some years later withdrew from active participation in the management of the works and at his death the entire control passed into the hands of his brother. Mr. James Johnston has been superintendent of the works and Mr. Warren Day bookkeeper for many years. The works were entirely destroyed by fire on the night of May 12, 1887, entailing a severe loss on the owners. They were, however, rebuilt as quickly as builders could do the work. So complete had been their arrangement that little change was deemed advisable when the present works were put up.

FRANKLIN C. BECKWITH was born near Schuylerville, Saratoga County, N. Y., on July 2, 1817, and remained on the home farm until he was nineteen years of age. He then became foreman under an elder brother who was engaged in laying sections of the track on the Boston & Albany railroad and subsequently received a division of his own extending from Chatham to East Albany. After a few years he became superintendent of both the track and freight department of the Troy & Albany railroad and remained in that position for several years. About

1839 he removed to Philadelphia and established the business of smelting iron but a year later entered the employ of the New York & Erie railway and had charge of laying the track on the Delaware Division of the road extending from Port Jervis to Susquehanna. He then removed to Niagara Falls and laid the railroad from that place to Lockport, N. Y. Returning again to the Erie he built the bridge on that road at Susquehanna and in 1853 took up his residence in Paterson and took the contract for laying the double track from Paterson to Jersey City. He was thoroughly devoted to business, of strict integrity and generous impulses. He died on February 8, 1875.

CHARLES D. BECKWITH was born fifty-one years ago on the homestead farm in Columbia County, N. Y., and in his early years assisted his father in various enterprises. In the city of Paterson he soon rose to prominence as a manufacturer and a public spirited citizen. His liberality, both in opinion and purse, made him hosts of friends and he was frequently importuned to become a candidate for public office. He, however, disliked public life and when in 1872 he was elected Alderman from the Fifth Ward he resigned after having served only a portion of his time. Ten years later he was again induced to accept the Republican nomination for Alderman in the Fifth Ward; he was elected but it was only with difficulty that his friends induced him to serve out his term. In 1885, after having a number of times declined nominations for various offices, he was induced to accept the nomination for Mayor; he was triumphantly elected over a strong adversary and in 1887 he was re-elected. In the following year he was unanimously chosen the candidate of the Republican party for Congress from the Fifth Congressional District of New Jersey, being the first man who ever received that nomination without a struggle. He was elected, running considerably ahead of his ticket. Mr. Beckwith is one of the most straightforward and liberal of men; he has a personal magnetism which attracts to him all men who admire frankness and good nature.

THE KEARSLEY & FOOT COMPANY.—This company manufactures files and rasps at Riverside, a flourishing section of the city of Paterson, and has offices at No. 101 Chambers street, New York. The company has a reputation and a trade co-extensive not only with this country but extending to many foreign nations. Their works are recognized as among the largest and best equipped of the kind in the country. The company founded its business in 1877 and is officered as follows:—President and treasurer, James D. Foot; vice president and general manager, James Kearney; secretary, Sanford D. Foot. The president of the company is in personal charge of the New York office. The large body of workmen employed at the factory are greatly facilitated by the use of specially improved machinery invented for the purpose, which is remarkably ingenious and has served to place this concern upon a footing with its most formidable competitors in any part of the world, as regards the ability for rapid and perfect production, and is aiding the company to produce

a file which takes no second place when pitted against any file with which it may be brought into just competition. The raw material used is the best English and American steel and in the selection of it the utmost care is exercised and only such used as can withstand the severest tests. The output is one of great magnitude and importance and comprises all the various grades of cuts known as rough, bastard, second cut, smooth and dead smooth—is also the leading shapes flat, half-round, hand, pillar, equalling, cotter, square, round, three square, mill saw, taper saw, slim taper saw, double-cut taper saw, crossing, cabinet rasps, cabinet files, wood rasps, warding files and joint files. From two and a half to three tons of steel are cut up and made into files each working day of the year, the present output being about twelve hundred dozen a day. While competition in this business is so close that hardly six months pass without some file manufacturer going out of business this company owing to the superior quality of their files not only have all the business they can attend to but for the past year have been obliged to decline all new trade. But with constantly increasing facilities they hope in the course of a year to still further increase their very large production. Some little idea can be formed of the character of the work of this concern by considering the numerous shapes and cuts of files made, varying in length from two to thirty inches, in weight from the fraction of an ounce to five pounds or more for a single file, and in cut from teeth so fine that a magnifying glass is necessary to see them to teeth so coarse as to form only twelve to an inch. All these files and rasps are guaranteed as to quality and are recognized as unexcelled either for workmanship, finish or durability by any other house extant. A ready market is found for these goods in all sections of the United States and a heavy export trade is enjoyed with many foreign nations. All orders by mail or telegraph are promptly attended to at the New York office and are filled direct from the factory. Customers in all parts of the country may fully rely on the ability of this company to make such selections as will satisfactorily meet all requirements of the trade and the public.

BENJAMIN EASTWOOD, one of the most progressive and energetic of the men in Paterson engaged in industrial pursuits, was born in Lancashire, England, on October 31, 1839. After receiving a common school education he was placed in a machine shop where he learned his trade during the day time, in the evening attending school. After about nine years of a life of this kind he came to this country in 1863 and after being employed as a machinist for William Funstell and others in Paterson for some time he went west where he worked as machinist in Milwaukee. After returning to Paterson he was induced to go to Mecklenburgh County, North Carolina, where he was engaged to erect the engines and machinery of a gold mining company. After having started the machinery he was appointed superintendent of the mines and remained with the company about two years and a half. The ores being very poor the mining enterprise proved a failure and he

was glad to return to Paterson once more. After working for some time as a machinist he started a small machine shop in the Union Works near the Rogers Locomotive Works. After a few months he received a very flattering offer to go to Venezuela as mining and mechanical engineer, the mining company agreeing to purchase nearly all the tools of his shop. The offer was accepted after some consideration, as he found it slow work building up a business without capital and in a place where he was little known. This enterprise proved a success but after being away about one year and having contracted the fever so prevalent in that country he decided to return to Paterson again. He then obtained employment in one of the locomotive shops, but seeing no chance for advancement, he accepted a good offer in a New York experimenting shop; he remained there about eighteen months. At this time machinists all over the country were bending their energies to discovering some proper motive power for propelling canal boats which would be an improvement on the mule, an animal which was not giving very good satisfaction at the time. Although the experimental shop did not attain distinction in this direction Mr. Eastwood acquired a great deal of practical knowledge of various kinds of machinery which has assisted him materially in building up his business. He then returned to Paterson and this time to stay; he commenced to work for the Whitney Sewing Machine Company and remained with them about one year.

After having accumulated a small sum of money and acquired some property, he commenced business in September, 1873, in Van Houten street in Mr. Robert McCulloch's building. The building soon proved too small and he removed to the Beaver Mill, and after about eighteen months spent there he built and took possession of his new shop in Ramapo avenue. Mr. Eastwood's splendid business qualifications, his energy and the care he took that every machine which left his shop should be as perfect as care, good material and good workmen could make it, soon established a reputation for him which he fostered by continuing in the way he had begun. He soon found himself compelled to look for further room and he erected a machine shop and foundry. Increasing orders compelled him to extend his operations and for some time his attention was divided between filling orders and erecting buildings until he was in possession of one of the finest machine shops in the country. His main establishment is situated on Straight street and runs through to Ramapo avenue, the shop which he first occupied in that thoroughfare being only an inconsiderable portion of his whole establishment. The main building is 100 feet front by a depth of 57 feet; it is four stories and a basement in height and is throughout equipped in accordance with the most approved plans for labor-saving, light, &c. In one end of the building is a large elevator with a driveway adjoining so that machinery may be put together and loaded direct on trucks for shipping. The main building has a wing in the rear 50x40 feet. The foundry is in the shape

of an L, its dimensions being 100x40 and 60x40. In addition to these buildings there are cleaning shops, store rooms and a number of smaller structures.

In 1888 Mr. Eastwood having acquired more property on Ramapo avenue proceeded to erect a model silk mill in accordance with the English idea of providing mills such as manufacturers would want, all fitted up with machinery, engines and boiler and motive power, thus enabling capitalists to take possession of a fully completed mill without the annoyance and delay of building and preparing themselves. The building has four stories and a basement; it has a frontage of 40 feet and a depth of 125 feet. Mr. Eastwood experienced no difficulty in finding a tenant and the mill has always been running to its full capacity. Mr. Eastwood's machine shop and the silk mill obtain their power from a Hughes & Phillips' 250 horse power compound engine, each establishment being independent of the other, the engine and boiler house being stationed between the two; there are two upright boilers of the Manning pattern, each having 150 horse power.

Mr. Eastwood manufactures silk machinery of all kinds, winders, doublers, drawside frames, French, English and American quilling and spooling frames, ribbon blocking machines, power and hand warpers, beamers and cleaners; gros grain and dress goods power and hand looms. He also makes the famous Swiss loom and his high speed crank loom. He also does a general business in shafting, pulleys and hangers and manufactures all kinds of tools and light machinery to order. Among his specialties may be mentioned Eastwood's improved ribbon blocker, for hand or power, in which the blocks are held in place by three jaws working in slanting grooves and opened by pressing two knobs by thumb and finger, thus doing away with the old style thumb screw and thereby saving much time and trouble; and Eastwood's new improved power reeling frame with measuring attachment for skeining silk from bobbins, a strong and easily operated machine. Some time ago Mr. Eastwood indulged in a new departure in the silk machinery line and engaged in altering and constructing new patterns, so that he is prepared to furnish ribbon looms of new and improved design, of high and low pattern; he also put in special machinery for the manufacture of straight and circular shuttle battons. His shops are the largest and best equipped in the city for the manufacture of silk machinery.

JOHN ROYLE & SONS.—The members of this firm are Messrs. Vernon Royle and John Royle, Jr. Their commodious buildings which have recently been constructed are located on the corner of Straight street, Essex street, and Ramapo avenue. Their line of manufacture extends among the finer grades of machinery and includes numerous and important specialties of their own, many of which are patented, besides the designing and building of such machines as require intelligence and skill. The merits of their specialties have received flattering recognition abroad as well as in this country, consequently the trade of this firm extends to Canada, Europe and Australia, and makes

this establishment an important factor among the industries of Paterson. Among the specialties manufactured by this firm may be mentioned the High Speed Routing Machine. Its purpose is to deepen (technically called routing) with facility those surfaces which require to be depressed on engraver's blocks, wood cuts, etc., leaving the surface from which the impression or prints are to be taken in bold relief. By strict attention in designing the details, a perfectly smooth and uniform movement of the cutter is secured, inasmuch that in the hands of a skillful operator one-half of a scratched line can be routed away and the other half left on the plate.

The cutter spindle makes 12,000 to 14,000 revolutions per minute, a speed not attainable in a poorly constructed machine, nor does this high speed of cutter cause any tremulous motion to the machine nor impair its usefulness. Although Royle & Sons were not the originators of this machine, they built the first one of its kind, and their experience in building these machines enabled them in after years to add many improvements, bringing it to such a state of perfection that to-day it has attained a pre-eminent rank among the machines of its class. In connection with these machines, cutters of various forms are required and the firm have a separate department of their works that is exclusively devoted to the manufacture of all kinds of cutters used for routing purposes. The Royle Routing cutters are made with special machinery and appliances of their own design that have been added from time to time to the works of the firm as requirements demanded. Their cutters have become famous for their excellence throughout this country wherever routing machines are used.

Another one of their specialties is a new cabinet saw of very neat design; it is used for cutting and squaring up stereotype plates or photo-process engravings; it will cut blocked as well as unblocked plates. The repeater for Jacquard cards is another one of their specialties. This machine is designed for re-producing Jacquard cards rapidly. It is automatic in all its motions and is abundantly powerful and strong to do the heaviest cutting required.

The absolute certainty with which all the motions on this machine will perform their several functions places it far in advance of any other of its kind. The punches in particular are infallible in their action; no springs, cords, nor other uncertain appliances being used to control them. The Royles were the first to undertake the manufacture, in this country, of this class of machines.

Still another specialty is their piano machine for Jacquard cards. It is adapted to cut cards from 100s to 900s Jacquard, and has besides the well known devices of those in common use, others which render it especially convenient and efficient.

The Royle Dobby is another specialty of theirs. This little machine is readily attachable to right or left looms, or looms of any width without special alteration or change, and may be quickly placed in position ready for use. Owing to a novel application of duplex toggle levers the

knife and grid when fully extended, assume practically a state of rest, or dwell. This feature is undoubtedly advantageous as a dwell at that stage affords time for the shuttle to pass through the warp with less lift and consequently less strain upon the warp threads. A recent improvement in the construction of this machine is that oil dripping off the working parts is prevented from getting upon the goods that are being woven.

Another specialty deserving of notice is a frame for guide pulleys which is a neat compact arrangement for adjusting the pulleys, making it adaptable for places in which there is no room for a countershaft, and also for guiding a twisted belt, transmitting motion to a pulley placed at right angles, or any other angle, to the driver.

This firm also manufactures many other kinds of improved silk machinery such as doublers, spinners, twistors, covering machines, broad goods and ribbon warpers, quillers, etc. The latter machine is used in winding the shuttle spools that are employed in weaving silk dress goods.

The Royle doubling-quilling machine is the first successful machine of its kind made in this country. Heretofore it has been customary to assemble the silk threads upon a doubling frame, preparatory to winding the quills upon the quilling machine. With the Royle machine, however, the assembling, or "doubling," as it is termed, is done with the winding of the threads upon the quill. By combining the two operations a large saving is effected, not only in labor but in floor space, power and in other respects. The machine has many other desirable features. In winding there is no friction whatever upon the silk, consequently "burning" or rubbing off of delicate colors is entirely avoided. Oil cannot be thrown from the working parts upon the silk, the mechanism being so separated below the threads as to completely obviate this evil. The accessibility of working parts has been studied very thoroughly and the machine is remarkable for convenience in this respect. In short, all the textile machines built at these works are the finest of their kind and meet most thoroughly the peculiar needs of the American silk industry.

Their waste and flushing valve for privy vaults has been favorably received. The construction of these valves is very simple and durable, and a great number are in use.

Another excellent machine made by this firm is one for manufacturing all sizes of plain and corrugated seamless rubber tubing, or tubing made of plastic material, such as celluloid, and other kindred compounds; this machine is also adapted for making solid cord and various odd shapes in soft and hard rubber, and for insulating wire used for electrical purposes. The advantage of this machine is, that it can make tubing very economically and of any length, whereas previous to the introduction of this machine by the Royles it was customary to make tubing by hand and in lengths not greater than twelve feet. Although this establishment had its origin amid very humble surroundings, it is to-day a notable example of the results of industry, enterprise and intelligence. Previous to 1862

Mr. John Royle, the founder of the firm, was engaged in the manufacture of rotary force pumps. In this year he rented a small room on Water street where he commenced and carried on a general machinist business, which expanded and in 1872 demanded larger quarters. Shortly after this, his son John was taken into partnership, and the name of the firm was thereafter John Royle & Son.

In 1879, his son Vernon was admitted into partnership, and the firm name was changed to John Royle & Sons. The prosperity of the firm again demanded larger quarters, which were found on Railroad avenue. Here the business began to assume considerable proportions and in 1888 led to the erection of the buildings now occupied and owned by the firm. The lot on which these buildings now stand is 200x100 feet, of which 100x50 feet is occupied by the main building. This structure has three stories, each 13 feet in the clear, and a basement of 9 feet.

All the rooms are well lighted and ventilated, and excellent provision has been made for heating by exhaust or by live steam, it is so arranged that either side of one story or the whole of it can be heated independently of the others. The following novel way of ventilating the basement has been adopted and works well: The boiler house adjoins the main building with a large archway left between the two; and on account of the 75 horse power Hazelton boiler, the boiler house is comparatively high. Its roof is provided with large ventilating sashes, and when these are open there results an upward current of air, which thoroughly ventilates the basement.

The main building is replete with the most modern improved machinery and facilities for handling material, enabling the firm to produce machines of excellent workmanship and meet keen competition. The machinery is driven by a 6x12 straight line engine, furnished by John E. Sweet, of Syracuse, New York.

The whole business is carried on in a very systematic manner; particular attention has been given to the tool room in which the tools used for manufacturing purposes are classified, and those used for each machine are placed by themselves in drawers which are properly labeled, so that the tools can be readily found and given out in good order when they are wanted. In fact no pains or expense have been spared to make this establishment a model shop.

Mr. ROBERT ATHERTON was born in Westchester County, N. Y. After he had attended school there for some time his family removed to New York and Mr. Atherton completed his education in the schools of the metropolis. In 1818 he came to Paterson and was first employed in a cotton mill. Subsequently he entered the employment of William Beresford, a manufacturer of rollers, for the purpose of learning the trade of machinist. At the death of Mr. Beresford Mr. Atherton went to work for Benjamin Buckley and in this establishment finished his education as a journeyman machinist. For the purpose of extending his knowledge of all kinds of machinery he obtained employment in the Danforth locomotive works and

remained there two years, at the expiration of which time he returned to Mr. Buckley's establishment, where he continued for two years. From 1857 to 1861 he was in the employ of John E. Van Winkle and then started in business for himself in Lane's building in Van Houten street. Here he remained about a year, when he obtained a room in the building occupied by John E. Van Winkle. Subsequently he formed a partnership with Samuel Watson and the firm of Atherton & Watson occupied a building in Van Houten street for two and a half years. Mr. Atherton started for himself on the dissolution of the firm and shortly afterwards removed to the Franklin mill, where he remained until the building was destroyed by fire. He then associated himself with Mr. George P. Van Riper in the Van Riper Manufacturing Company and for twelve years was superintendent of the factory of that firm. In 1878 Mr. Atherton again established himself as general machinist in the Franklin mill and he still continues his industry at that place. The schooling he had received in so many establishments added to a naturally inventive disposition soon brought abundant fruit in the shape of orders for silk machinery and other work. He started out with the determination that every machine that left his shop should be as perfect as skill and good material could make it and he has lived up to that principle ever since. He has obtained a number of patents on machines and it has frequently been said of him that his machines always do better than they are expected to do. He occupies about seven thousand square feet of room in the Franklin Mill, with a superb equipment of the finest tools and machinery, and employs upwards of fifty skilled artisans in the construction of hard and soft silk machinery, winders, doublers, power warpers, quilling machines and general and special machinery for all purposes connected with textile manufacture. Among the products of the establishment is a quiller which is claimed to be superior to any other for use in ribbon manufacturing, on account of its perfect stop motion, its economy as to waste and the admirable edge formed on the product. Among the specialties now made at the works is a spinning frame which is but eighteen inches in width—instead of two and a half feet, the ordinary width of these frames—and runs 216 spindles instead of 108. Peculiarly effective machinery, built at the works, has been in operation for several years past in accurately cutting and winding ribbon and telegraph paper, which is another important specialty of this establishment. Mr. Atherton's three sons assist him in conducting his business, Robert H. as superintendent of the wood-working department, Frank as general outdoor manager and Frederick as superintendent of the iron working department. Mr. Atherton himself maintains a general superintendence of the whole business.

It is but natural that a man of Mr. Atherton's character for uprightness and energy should be asked to take part in the councils that govern the city and county and as a matter of fact he has frequently been offered office. He, however, never evinced the slightest inclination to hold office

and always declined, preferring at all times to attend strictly to his business. He needed all his time to look after his commercial and industrial interests and as past successes had indicated to him that he was very useful in the sphere of machinist and inventor he preferred to continue in the course he had mapped out for himself when still a young man. Few persons in Paterson can boast of a larger circle of friends than Mr. Atherton and none can refer to a career which has been more useful.

THE WATSON MACHINE COMPANY.—One of the most important iron manufacturing establishments in the city of Paterson is the Watson Machine Company, whose inception dates back to the year 1850 when Mr. William G. Watson and his brother, Mr. James Watson, set up a machine shop in one of the buildings belonging to the Franklin mill property. They had previous to this obtained a thorough practical knowledge of machine-making in all its branches but it was with some hesitation that they embarked in business on their own account. Once launched, however, they devoted themselves to their business with untiring zeal and at the end of the first year they had turned out thirty thousand dollars' worth of machinery and found themselves in possession of a considerable plant. They then removed to the Nightingale mill where they occupied the whole of the first floor; they erected a blacksmith shop in the rear of the premises and subsequently occupied the second floor of the building. Then they built a frame foundry along the raceway on Van Houten street. In 1860 they purchased a large tract of land on the southwest corner of Grand street and Railroad avenue where they erected a large brick machine shop and introduced steam for the running of the machinery. Their specialty was mill-wright work but they never hesitated to undertake any kind of work in their line. In 1868 Mr. S. S. Post obtained the contract from Passaic County for the old Straight street bridge, and Mr. David Henry, who was a Freeholder, wishing to have it built in Paterson introduced him to the Watsons and they built this bridge. Mr. Post was so well pleased with the Paterson mechanical work that he entered into an arrangement whereby the Watsons built his bridges, which were patented, and they paid him a royalty on them. The firm did millions of dollars' worth of bridge work but their successful career received a check in 1872 when their establishment was destroyed by fire, entailing a loss of seventy-five thousand dollars. The disaster, however, did not check their energy and the machine works were at once re-built but on a considerably larger scale. In a short time they were again ready for orders and the latter were not waited for, as they came in from all quarters. The firm built a number of bridges for the Erie railroad company, including the fine structure at Susquehanna and the Portage viaduct. In addition to these they built a large number of bridges for Passaic County, for the city of New York in Central and Park, the Harlem River draw bridge for the Central Railroad. They furnished and erected the iron work for the Metropolitan Museum of Natural History, the Metropolitan Museum of Art, the

Equitable Building, the Lenox Library and other prominent buildings in New York city. After a number of additions had been built and the establishment was one of the largest in the country, the whole was again wiped out by fire in 1875, causing a loss of a hundred and fifty thousand dollars. Although seriously hampered by this severe loss the firm at once started again and put up the buildings at present occupied by the Watson Machine Company. These buildings are all of brick with the following dimensions:—One two stories in height, one hundred and twenty by forty-four feet on Railroad avenue and one hundred and fifty by sixty feet on Grand street; connected with this, on the south, on Railroad avenue, another, three stories high, fifty by seventy-five feet; next, south of the last, a foundry, one hundred and fifty by eighty-five feet; on Dale avenue a blacksmith shop fifty by one hundred feet, and a pattern house thirty by sixty, three stories. After their second fire in 1875 the firm confined themselves to the general work of a machine shop, having abandoned bridge and structural iron work. The business at first was carried on under the name of W. G. & J. Watson; in 1895 they were incorporated as the Watson Manufacturing Company; this was changed in 1885 to the Watson Machine Company, and the establishment at the present day is run by this company, which is composed of W. G. Watson, president; James Watson, vice-president; and Samuel J. Watson, secretary and treasurer.

WILLIAM G. WATSON was born March 4th, 1810, in Chorley, Lancashire, England. He came to this country when about ten years of age with his mother and met his father in Belleville, N. J., his father leaving there two years before. He worked there with his father in the print works and intended to become a printer, but injured his hand in the rolls. After staying in Belleville two years his father moved to Paterson and worked at Brundred's machine shop at Oldham, now known as Haledon. His son worked for three years in Colt's cotton mill and then began to serve his time as a machinist at Brundred's shop. He served an apprenticeship of five years and was foreman of a department six months before he was out of his time. During this time he went to the private night school of Mr. White in Smith street, and later walked up to Preakness from Oldham every night to learn draughting. After he was out of his time he was employed in the large machine works on Market and Hotel streets, and was a foreman there till the works were burned down in 1848. After this fire he became foreman for Hugh Beggs at the Union Works, and leaving there he succeeded Thomas Beggs, the father of James Beggs, as foreman of Smith, Jackson & McGuinness' shop. He moved to Newburgh for a couple of years and worked on very delicate machinery for making pins. From Newburgh he moved to New York and took charge of General Harvey's screw factory for a couple of years, and when there made arrangements to superintend the building of Israel Kingsman's burr machinery in Paterson. He remained there for five years conducting this business, assisted by his brother, James,

until they went into business for themselves as is described in the sketch of W. G. & J. Watson, the Watson Manufacturing Company and the Watson Machine Company. Mr. Watson was a man of great stability of character and one who by his ever pleasant ways and fair dealing made hosts of friends. In politics he was an unswerving Democrat. In 1855 and 1856 he represented the Fifth Ward of Paterson in the Board of Aldermen and in 1866 he was elected Mayor of Paterson. Although often importuned to again accept nominations for political offices he steadfastly declined. He died on July 7, 1884.

JAMES WATSON was born in Chorley, Lancashire, England, and came to this country when six years of age. He remained in Belleville for two years and came to Paterson with his parents, and when nine years old began to work in the duck mill, tending willow for John Colt for a couple of years, and then in the woolen mill, and again in the cotton mill for Joseph Nightengale. He began to learn the trade of machinist at Brundred's shop on the corner of Market and Hotel streets, under his brother William G., who was foreman. After this shop burned down he finished his apprenticeship at the Union Works. After he was out of his time he assisted his brother in all his undertakings and they worked together all their lives. James Watson attended to the outside work and traveled all over the Union securing orders and seeing to their execution. He and his nephew, Samuel J. Watson, now conduct the business of the Watson Machine Company.

SAMUEL SMITH & SONS.—Mr. Samuel Smith was born in Ireland in 1815 and came to this country when he was about twelve years of age. He was employed for some time in Digby, Nova Scotia, in the family of Rev. Bottsford Viets, after which he came to Paterson with his family. Here he learned the trade of moulder in the Rogers locomotive works and in 1843 associated himself with Judge Whitely and Thomas Beggs and established a machine shop in the Franklin mill. In 1845 he was associated with James Jackson, Patrick Magennis and William Swinburne, who constituted the firm of Swinburne, Smith & Co., and who erected a machine shop on property on the raceway between John—now Ellison—and Boudinot—now Van Houten—streets. At the opening of the Eastern Division of the Erie railroad in 1848 the firm gave up the machine business and started making locomotives, making the first engine for the Erie railroad in May, 1848. The firm employed about a hundred and fifty men and the first year turned out five or six engines. In 1849 the plant was removed to the building which is now the main building of the Grant locomotive works. Here they employed about three hundred men and carried on the business with great energy and industry for two years despite serious embarrassment due to their liberality in endorsing paper for other manufacturers. In 1852 the business was incorporated under the name of the New Jersey Locomotive and Machine Works and about six months afterwards Mr. Swinburne withdrew. The business was successfully carried on until some time after the

breaking out of the war of the rebellion, when O. D. Grant, of New York, acquired a controlling interest in the works and speedily reorganized the business under the name of the Grant Locomotive Works. Mr. Smith retired from business for a few years but restless under the burden of idleness he again engaged in manufacturing, having organized with the late Philip Rafferty the Rafferty & Smith Boiler Works. This business was carried on until 1872, when it was absorbed in the Todd & Rafferty Manufacturing Company, in which Mr. Smith was a minority stockholder. He was appointed an administrator of the estate of Mr. Rafferty and in the interest of the estate was elected President of the Todd & Rafferty Company. He might then have profitably disposed of his own interests in the works but he remained faithful to his trust as administrator of the estate of his deceased business associate; his interest was extinguished in the final settlement of the affairs of the company. In the mean time, in 1857, Mr. Smith had become interested in the Empire Manufacturing Company, having become associated in that enterprise with Jacob S. Rogers, D. B. Grant and Abram Collier; they built the Empire mill and conducted it with Aaron Polhemus, a practical cotton spinner, until 1872, when it was closed, having become unprofitable. In 1878 with his old time energy he again undertook the making of boilers, procuring for that purpose the commodious shop on Railroad avenue, near Greene street, formerly operated by Rafferty & Smith. In 1882 he took his son, Charles R. Smith, into partnership with him and the firm of Samuel Smith & Son was established. Since the death of Mr. Smith, which took place on March 28, 1888, the business has been conducted by his son under the old firm name.

The boilers made by this firm have a reputation for excellence in material and workmanship second to none, as is attested by their being placed for power and heating in a number of large structures in this country, including The New York World building, the Washington, Boreel, Mutual Life, Aldrich Court, Columbia, Manhattan Elevated railroad company's buildings, the Wagner Palace Car Company's building in Buffalo, the large mills of the Barbour Flax Spinning Company and the William Strange silk mills in Paterson and in most of the factories in the cities of Paterson and Passaic.

Mr. Smith was married in 1837 to Alicia Morrow, a daughter of Arthur Morrow, of Paterson, a member of the Morrow family, who for a number of years operated the woolen mills at Hawthorne, then and still known as Morrow's Mills. At his death he left his widow and six children, Margaret E., Jane E., Alicia M., Samuel, William M. and Charles R., surviving him.

Mr. Smith always took a great interest in everything pertaining to the advancement of the city of Paterson and his counsel and assistance could always be relied upon. He was a member of the second board that had charge of the municipal government of the city, having been elected a committeeman in 1853. In 1856 he was elected Mayor

of the city and subsequently in 1868-70 represented the Fourth Ward in the Board of Aldermen.

J. C. TODD'S MACHINE WORKS.—Joseph C. Todd, who had learned the trade of carpenter at Somerville, N. J., came to Paterson in 1836, and being employed in the machine shop of Godwin, Clark & Co., learned to make patterns there for machinery. Several years after, while employed in the Oldham works, he built the first successful hemp spinning machine. This turned his thoughts in a new direction and in 1847 he formed a partnership with Daniel Mackey, another skillful Paterson mechanic, and they set up for themselves in the building of hemp and flax and other machinery of all kinds. They had very little capital and hired a part of the first floor of the old frame Nightingale mill on Van Houten street, taking possession July 3, 1847. They had only two lathes, one of which they had borrowed. They there built the first silk machinery made in Paterson. From this humble beginning they gradually built up a business that in two years' time demanded ampler accommodations and then they took the basement of the shop owned by the Bradleys, where the Machinists' Association works now are on Prospect street and Broadway. In 1850 Philip Rafferty, a successful business man, and a very shrewd financier, was taken into the firm, which then became Todd, Mackey & Co. In November, 1850, they bought the present location of the works on Van Houten street, next west of the old Nightingale mill, where the business had been commenced. It is a striking evidence of the success of the concern that their works are far more extensive than the whole of the Nightingale mill, of which they originally occupied but a very small part. In their new quarters the firm engaged far more extensively than before in the manufacture of hemp and flax machinery in all its branches, including rope machinery, jute and bagging machinery. The firm also engaged on a large scale in the building of steam engines of every class and in a short time had acquired an enviable reputation in that department of manufacture. Their original business continued to prosper until they became the only manufacturers in America of hemp and flax machinery. Mr. Todd gave this his closest personal attention, making several valuable inventions in this class of machinery, on which patents were taken out from time to time. In 1855 Mr. Mackey retired and the firm became Todd & Rafferty. In the spring of 1872 the concern was turned into a stock corporation, the Todd & Rafferty Machine Company, Mr. Todd being president and Mr. Rafferty treasurer. The boiler shop of Rafferty, Smith & Co., on Railroad avenue, was merged into the company also. Mr. Rafferty attended to the New York business generally, where the firm had a large store for the sale of machinery and an agency for their works. Mr. Rafferty dying in July, 1872, the affairs of the company were thrown into chancery and for a month or two the shops were closed, when Mr. Todd resumed the control of the works, which he has since retained. When the panic of 1873 came on and nearly every machine shop in Paterson was closed, he

went about and by indefatigable industry got orders for all sorts of engines and machinery whereby he was enabled to give employment to a goodly number of men. Anything and everything that came along and promised work was confidently taken in hand. For instance, there was a large order for the Baxter marine engine, at a time when that engine was expected to revolutionize the system of navigation on the Erie canal. Since then large numbers of these engines have been turned out for use on steam launches, yachts, tugs and freighting vessels of every size. They are from two to forty horse-power and sell at from \$120 to \$2,350. Mr. Todd has also become the owner of the patent Baxter portable engine, of which he has manufactured many hundreds. These little engines are from one to four horse-power and sell for \$150 to \$350. They are much used in printing offices, in running sewing machines and wherever a small power only is needed. One of them will run a press for ten hours and with the consumption of half a bushel of coal. It is no wonder they are popular. One of them occupies only about as much room as a large base-burning stove. Mr. Todd still builds steam engines of all kinds and sizes, not confining himself by any means to these small portable engines. He also makes flax, hemp, jute, rope, oakum and silk machinery, which finds its way to all parts of the world. He built the first silk machinery used by James Walthall, by John C. Benson, by Hamil & Booth, and others. While some of the imported foremen in flax and hemp mills in America declare that there is no machinery equal to that made in the "old country" and consequently discourage the use of American machinery, on the other hand there are at least a dozen of the leading flax, jute and hemp mills in England and Scotland which are equipped with machinery built at the Todd works in Paterson. This is a significant commentary on the unreasoning prejudice too often evinced by the imported foremen and superintendents who are disposed to see nothing good that does not come from abroad. In Russia the native hemp is separated and spun by machinery invented and built by Mr. Todd, and his machines have found their way even to China and Australia, while for forty years the products of this concern have been familiar in Mexico, South America and Canada, as well as throughout the United States, wherever flax and hemp machinery is used. Rope machinery of all kinds is made, including machinery for making ropes out of sisal, a species of hemp from Mexico. Mr. Todd has filled orders to the amount of hundreds of thousands of dollars for machinery to make twine to be used on patent harvesters in tying up the grain with twine instead of wire. A spinning jenny with a fine flyer twists the twine and runs it off on the bobbins, from which it is wound off into balls eight inches in diameter, and these are attached to the harvesters by machinery which draws out the twine and binds the grain and ties a knot as neatly as the most experienced hand could do. The works comprise a brick building, three stories high, 110x15 feet, with extension 10x75 feet, the first story being

used for engine-building and turning, and the second and third for fitting, carpenter work, &c.; a frame machine shop, 130x30x50 feet, part of it one story and part of it two and a half stories high; a brick foundry, 35x120 feet; besides a pattern shop, a mill wright shop, carpenter shop, &c. Mr. Todd's store in New York is at No. 36 Dey street.

JOSEPH C. TODD was born in Bridgewater Township, Somerset County, N. J., March 2, 1817. His father, John L. Todd, engaged in agricultural pursuits during his life in that locality, was a man of character and standing, and one of the lay judges of the county for several years. His mother, whose maiden name was Ann Castner, was born near Somerville, N. J. Seven children were born of the marriage, viz.:—Stephen; Catherine, who married Lewis Harrison, of Somerville; Joseph C., James, John A., Augustus, and Rachel Ann, wife of John Van Nostrand, of Romulus, N. Y. Stephen resides at Dunellen, N. J., where he is a large property owner; James has been successfully engaged in the dry goods business in New York city for many years; John A. is a minister of the Dutch Reformed denomination and pastor of the church at Tarrytown, N. Y.; Augustus is also a minister of that denomination and pastor of the church at Schoharie, N. Y.

The early years of Joseph C. Todd's life were passed in his native county where he received a good common school education. At the age of sixteen he left home in order to learn the trade of carpenter with his uncle, James Castner of Somerville, where he remained three years. He then went to New York city, where he worked at his trade as journeyman for a few months, and when nineteen years of age came to Paterson, where he worked in the employ of David Reed for a short time, laboring, among other things, on the Cross street M. E. Church. Soon after he secured employment in the machine shop of Godwin, Clark & Co., where he remained about a year and meantime learned how to make patterns for machinery. He next entered the machine shop of Rogers, Ketchum & Grosvenor and was there employed when the first locomotive engine, the "Sandusky," was built in 1830-37. He at first made the wooden frames to put around locomotives but when William Swinburne was promoted to the superintendency, succeeded him as pattern maker and worked in that department in connection with Watts Cooke and John Cooke. He remained in that position for four or five years at a dollar a day compensation and then established a sash and blind manufactory, which he soon gave up. He next occupied the position of head patternmaker in the Oldham machine shops for a few years and while there devised the first successful hemp spinning machine that was ever built, making several improvements in the original plan of construction. He has since made a specialty of manufacturing hemp and flax machinery and has taken out several different patents on them in this country and in Europe, the latest on May 15, 1880. In 1841, in company with Daniel Mackey, he engaged in the manufacture of

hemp and flax machinery in the James Nightingale mill, on the lower raceway, and met with so much success that two years later they were compelled to seek more commodious rooms in the Bradley mill, which stood on the present site of the Machinists' Association building. Three years later, needing both more capital and more room to meet the demands of their rapidly increasing business, Philip Rafferty was admitted to the concern, and in 1850 the firm of Todd, Mackey & Co. was organized. The new firm at once purchased of the estate of Daniel S. Holsman the property on the lower raceway that has since been occupied by the extensive machine shops of the concern, and commenced the manufacture of machinery on a large scale. In 1855 Mr. Mackey withdrew and the enterprise was carried on under the name of Todd & Rafferty, until April, 1872, when it became the Todd & Rafferty Machine Company, with Mr. Todd as president and Mr. Rafferty as treasurer. The latter died on July 30, 1872, and the business has since been conducted by Mr. Todd alone. Upon securing the present location in 1850, the concern began the manufacture of steam engines and gradually ran into the making of flax, hemp, silk, jute and bagging machinery of different kinds. The products of the works have been sold all over the world, and the machinery for not less than a dozen factories in England and Scotland has been designed, built and put up by the concern. Mr. Todd has been the mechanic of the enterprise throughout the entire term of its existence, and his skill and ability in that direction have contributed very largely to its success. He has visited Europe three times on business for the firm in 1850, 1860, 1862 and 1863. Besides being engaged in the making of machinery he has also been actively connected with other manufacturing enterprises in which he has achieved great success. For eighteen years he has been engaged in the manufacture of jute bagging for covering cotton, on the corner of Taylor and Jackson streets. New mills were erected in 1873 and the capacity of the works is six thousand yards of bagging a day, about ninety men being employed. Mr. Todd is also chief owner of a silver mine in Colorado and the sole owner of the Davenport Consolidated Mining and Smelting Company of Mineral City in that state.

He has never been a public man or engaged in political matters, although he was city treasurer of Paterson for three or four years, at the same time filling the position of Alderman from the Sixth Ward. He has been a large stockholder in the Mechanics and Traders' (now First National) Bank of Jersey City from the time of its organization. He was married in 1836 to Miss Emeline Bogardus, of Paterson, and has two daughters, Harriet and Anna Todd.

THE RIVERSIDE BRIDGE AND IRON WORKS.—The Riverside Bridge and Iron Works were established about 10 years ago, by Mr. Charles O. Brown, and he has been at the head of that establishment ever since. He was born and educated in Germany, and commenced his career as Civil Engineer in 1872, on the Fourth avenue improve-

ment in New York city. In 1873, he was admitted to membership in the American Society of Civil Engineers, and has been identified with the designing and manufacturing of structural iron since that time.

The immediate cause of the establishing of the works was his three years' trip to South America, whence he returned with numerous orders. The works which were established on a small scale, covering only eight city lots, to fill these orders, were extended, and they include at present the block bounded by Lyon, East 5th, Putnam and Wait streets, thus covering 20 city lots, the property of the present company. They adjoin the Erie Railroad and a switch runs into the works. The latter circumstance enables them to manufacture very large girders and other heavy pieces of iron work which are placed directly upon the cars of the Erie Railroad.

This establishment on account of long experience and practical engineering knowledge has been constantly improving, particularly the construction of fire-proof buildings in New York city, and has thus been instrumental in changing the style of construction during the last ten years. While before that time a girder thirty feet long was considered a heavy piece of iron to put into a building, the putting in of girders one hundred feet long, made, shipped and erected in one piece, is at present not extraordinary at all.

In 1888 the proprietor deemed it advisable to transform the business into a company, of which he himself is now president, with Mr. G. Planten, treasurer, and Mr. W. G. A. Millar secretary. A branch office is established at 18 Broadway, New York city.

A large number of iron structures have been erected in that city and Brooklyn by the company. At this moment for instance, they furnish the iron work for the large store-age and warehouse in course of erection on the corner of 43d street and Lexington avenue, N. Y., and for the so-called Wechsler building, in Brooklyn, at Fulton and Duffield streets, besides numerous other works in the above cities.

But, as has been said before, the company's field of labor is not restricted to the United States, and in South America the name of the Riverside Bridge and Iron Works is creditably connected with the erection of many bridges, telegraph towers, piers, etc.

The average number of hands in the shop and outside is two hundred, turning out 20,000,000 pounds of manufactured iron per year.

The company manufactures not only railway and highway bridges, but also structural and ornamental iron work of all descriptions for buildings, iron awnings, balconies, beams, capitals, columns, cornices, domes, doors, fire escapes, fronts, girders, lintels, patent lights, roofs, railings, rolling and folding shutters, side-walk, elevators, sills, sky-lights, stairs, stoops, window guards, etc.

Space does not allow to give a complete list of all the important buildings and bridges made by this company, but among them are the following:

Bridges—The new iron bridges for the Rochester Di-

vision and Jefferson branch of the N. Y., L. E. & W. R. R.; Hackensack draw, Erie R. R.; Passaic Falls; Clay Street Bridge, Newark, N. J.; Float bridges, piers 7 and 8, Long Dock, Jersey City; Float bridge, Lehigh Valley; float bridge for the Standard Oil Company, besides a number of Highway bridges in New Jersey and elsewhere.

Buildings, etc.—Liverpool, London and Globe Building, Newark, N. J.; Zinsser buildings in Washington and Beach street, and William street, New York; Arion building, New York; Erie R. R. Ferry shed, Jersey City; Building of Smith, Gray & Co., Brooklyn; Manhattan Storage and Warehouse, 12d street and Lexington avenue; Grand stand and club house, and saddling paddocks, Morris Park, etc., etc.; Freight sheds for Pacific Mail Steamship Company, at Aspinwall; Passenger stations Panama R. R. at Colon and Panama, etc., etc.

THE PIONEER SILK COMPANY.—Mr. John Ryle bore the same relations to the silk industry of this country that Mr. Thomas Rogers bore to the locomotive industry; it would be impossible to give even a meagre account of the silk industry without dwelling to a greater or less extent on the work of John Ryle, without referring to his indefatigable exertions or admiring the zeal and energy with which he laid the foundations of an industry which has brought fame and fortune to Paterson. The indirect heritage of Paterson from Mr. Ryle consists of thousands of looms and scores of mills; the direct heritage consists of the Pioneer Silk Company and the Passaic Water Company; his connection with the latter is ably told on other pages by one of his co-laborers; the subject of this sketch is his connection with the silk industry.

When Mr. Ryle first came to this country he went to Northampton, Mass., where he worked on a ribbon loom in the employ of Samuel Whitmarsh, who had begun the manufacture of silk on a very small scale. After spending a few months he went to New York where he established the silk importing business in a small way on the corner of Maiden Lane and William street. His brothers in England furnished him with his stock in trade, consisting of silk handkerchiefs. He continued in this business but a few months when he became acquainted with George W. Murray, with whom he was afterwards associated for years. Mr. Murray contemplated establishing the silk business in Paterson and at his solicitation Mr. Ryle visited that city for the purpose of examining the old "Gun Mill" of Samuel Colt with a view to its appropriation for the uses of silk manufacture. Up to this time no silk had been manufactured in Paterson, although Christopher Colt had made the attempt without satisfactory results. This was the foundation of the silk industry of Paterson, and, in fact, in the United States, for until Mr. Ryle bent his energies in that direction none but abortive attempts had been made to manufacture silk in this country. Mr. Murray purchased the mill at Mr. Ryle's advice and at once started the manufacture of silk, placing Mr. Ryle in full charge of the mill. Mr. Ryle was the first in this country to put silk on a spool, the successful experiment being due to a conference be-

tween him and Elias Howe, the inventor of the Howe sewing machine. This enabled Mr. Howe to overcome one of the chief difficulties he had in perfecting his sewing machine, a way to feed the silk thread to the needle. Mr. Ryle's machine twist was the first produced of its kind that could be successfully used on a sewing machine. This was the beginning of the spool silk business which has since attained such large proportions in this country. Three years after the purchase of the mills, Mr. Ryle was taken into partnership and the firm of Murray & Ryle did a flourishing business in the manufacture of sewing silk and twist until the year 1846, when Mr. Ryle purchased Mr. Murray's interest and continued the business alone. Mr. Ryle was ceaselessly experimenting for the improvement and development of the industry and was untiring in his efforts to get it properly recognized by Congress. As early as 1842 he began waiting on the sessions of that body to urge the members to sustain the infant manufacture by adequate protection but it was twenty years before his views prevailed in Washington. He now began experimenting with power looms but his efforts did not succeed. The World's Fair coming to New York in 1852, he set about weaving an American flag of silk, and produced a magnificent banner about twenty by forty feet, which floated for many months over the Crystal Palace in New York, a never-failing object of admiration by patriotic Americans. It was the first time the national ensign had ever been produced from American silk looms. Of course Mr. Ryle received a medal and unbounded praise from the managers and from the public in general but it put little money in his pocket. In 1855, he began the erection of a new mill which he called after his old patron, the Murray mill. It was on Mill street, opposite Ward, was seventy-three by two hundred feet in area and two stories high. The mill was built for the purpose of making sewing silk by hand. Before the mill was finished there was held in it a great Republican meeting, the first in Paterson, which was addressed by Henry Wilson, afterwards Vice President of the United States. In 1850 Mr. Ryle was running both the Gun mill and the Murray mill; he occupied the two lower floors of the former besides a small shop by the river. He was then employing between five and six hundred hands and used twenty-five or thirty bales of raw silk weekly, a production that was not exceeded by any mill in Paterson for ten or fifteen years afterwards. About 1860 he began weaving once more on the second floor of the Murray mill and a year or two later removed from the Gun mill and concentrated all his business in the Murray mill. At this time the breaking out of the war had greatly injured the manufacture of silk and the production was now almost entirely used in the manufacture of flinges. The enactment of the protective tariff of 1862-63 and the high rate of exchange gave the American silk industry an impetus which it had long needed and Mr. Ryle experienced the benefits in common with others. In 1868 he added a third story to his mill and enlarged his production, making trams and organzines, spun silks and em-

broidery silks. No weaving was carried on in the enlarged mill. Between four and five hundred hands were employed. While thus embarked on the full tide of prosperity a fire broke out in the mill on the afternoon of May 10th, 1869, and within an hour the entire splendid structure lay a smoking mass of ruins and \$400,000 worth of property had been swept out of existence. There was not a dollar of insurance, so that Mr. Ryle's loss was total. It was enough to have crushed an ordinary man, but Mr. Ryle was not of that kind and without any delay he set about the erection of a new Murray mill. This was on a new plan, which has since been followed by a great many silk manufacturers. It was of brick, but only one-story high, lighted only from the roof by sky-lights with a northern exposure, the different rooms separated by solid brick partitions and many of the floors laid with bluestone flagging. The building covers an acre and a half of ground and is virtually fireproof, besides being far more convenient and much safer than if several stories high. Mr. Ryle organized the Ryle Silk Manufacturing Company but this was subsequently changed to the Pioneer Silk Company. The company manufactures all kinds of silk, does all its own throwing and dyeing and is one of the very few establishments where all the processes of silk manufacture are carried on under the same roof. After the death of Mr. Ryle a number of others were admitted as stockholders. The president and treasurer is William Ryle; the vice president, Peter Ryle; the superintendent of the Paterson mill is Thomas M. Ryle, and the superintendent of the Allentown (Pa.) mill, an annex of the Paterson mill, is Reuben Ryle. Messrs. G. A. Hobart, J. W. Griggs, E. T. Bell, F. W. Wettlaufer and Fleitmann & Co. are stockholders. John Ryle, Jr., who had been a stockholder, died on August 30, 1886.

JOHN RYLE was born in the village of Bollington, near Macclesfield, Cheshire, England, on October 22, 1817. His father was a machinist by trade. Out of a family of seventeen children only five grew to years of maturity, namely, Reuben, William, John, Sarah and Peter. Reuben and William became prominent silk manufacturers of Macclesfield, England. Reuben was the father of John C. Ryle, at present extensively engaged in the silk manufacture in Paterson, and William of the late William Ryle, of this city. Peter also engaged in the manufacture of silk in Paterson and died there. In 1820 John Ryle's parents moved from Bollington to Macclesfield, where his father died in 1824 and his mother a few years afterwards. Thus early in youth was Mr. Ryle launched alone upon the sea of life. He never enjoyed any school advantages and imbibed all his education at the Sabbath school. Remarkable though it may seem he was placed in a silk mill at the tender age of five years and thus was veritably cradled in the midst of an industry that largely through his fostering care and intelligent labor has become one of the most important in the United States. Mr. Ryle worked in various silk mills in Macclesfield until 1839. At that time, although superintending in a satis-

factory and successful manner the large business of his brothers, R. & W. Ryle, he determined to embark for the New World to seek his fortunes among strangers in a strange land. His brothers were unable to dissuade him from what appeared in a youth of his years and experience a suicidal and disastrous course, and on March 1, 1839, he sailed from Liverpool. His struggles and reverses in this country, happily crowned with success in his later years, have already been told. Mr. Ryle died at his home in Macclesfield on November 6, 1887; he had been spending some time abroad in company with his daughter, in search for health and recreation. His remains were returned to this country and after funeral obsequies in the Second Presbyterian church, which were attended by a large concourse of the residents of Paterson and a goodly number of persons from other cities, were interred in Cedar Lawn Cemetery, where a noble shaft marks the last resting place of the man who did so much to bring about the present prosperity of the city of his adoption.

DEXTER, LAMBERT & Co.—The firm of Dexter, Lambert & Co. was organized nearly forty years ago at Boston, Mass., by Anson Dexter, who previously had been associated with the late Mr. B. Tilt, in the firm which had for some time been known as Tilt & Dexter. When Mr. Tilt retired Mr. Catholina Lambert and Mr. Charles Barton entered the firm, which has since been known as Dexter, Lambert & Co.; in 1861 Anson Dexter retired and his son, George R. Dexter, and William Nelson Lambert, brother of Catholina Lambert, were admitted. W. N. Lambert visited South America never to return, dying there in 1869. George R. Dexter retired in 1875 and died three years afterwards; Henry B. Wilson entered the firm in 1878; Charles Barton, since deceased, retired in 1880, after nearly thirty years association with Mr. Catholina Lambert. W. F. Suydam, Charles N. Sterrett and Walter S. Lambert entered the firm in 1885 and these gentlemen with Mr. Catholina Lambert and Mr. H. B. Wilson now constitute the firm.

The firm first occupied as a factory a two-story frame building 100x40 feet, located on Coventry street, so named by Mr. Tilt; the street has retained the name ever since. The machinery first used by them consisted of looms for weaving fringes and gimps, gimp machines, spinning wheels, braiding machines and a small plant of throwing machinery, capable of producing twenty-five pounds of sewings per day. They were at that time engaged in manufacturing upholstery, military, parasol, millinery, hatters', furriers', cloak and dress trimmings and were in fact what was called in those days a trimming house. They, or rather their predecessor, attempted ribbon weaving in 1849, but it was not a success financially, for the greater part of the ribbons made, not being sold, were purchased by Dexter, Lambert & Co. at the time of their organization. This, it is said, was probably the first attempt at ribbon weaving in the country; if so, to this house belongs the credit of being the pioneers in this branch of the silk industry. In 1850, having taken from a

New York importing house what was then considered a large order for ribbons, the firm again started ribbon weaving. This venture, like the previous one, proved unprofitable, but from this time forward they continued the manufacture of ribbons until success rewarded their efforts and in the prosecution of this branch of their business they have from time to time made important additions in the way of new and improved machinery and appliances. Up to 1850 no other concern, excepting Andrae & Roth, of New York, is known to have made any attempts in this direction. The increasing business of Dexter, Lambert & Co. obliged them to provide added facilities for manufacturing, to meet which they in 1850 commenced the erection of a three-story brick mill 100x50 feet in Lennox street, Boston. In 1858 the firm had met with sufficient encouragement to justify them in sending Mr. Barton to England to purchase additional looms for ribbon weaving and other machinery and this plant was placed in the new mill, just erected.

Attracted by Paterson and its surroundings Mr. Lambert decided to make it his place of residence and in 1861 with this view he purchased his present country residence at South Paterson, then known as the James Close homestead, removing thereto in that year. A desire to have the manufactory nearer to New York and under his personal supervision, the low price of real estate and the advice of Mr. Robert Hamil and other friends were the considerations which induced Mr. Lambert in 1866 to purchase a mill site on the east side of Straight street and thereon erect the Dexter mill, a three story brick building, 220x50 feet, with detached buildings for engine and dye houses. The removal of the firm's machinery to Paterson was followed by the gradual withdrawal of their stock and closing up of outside stores and the concentration of their merchandizing in New York. To describe the various cotton, worsted and silken fabrics manufactured by this firm during the years they have been in business would be impossible. The vagaries of fashion or the demand of the times have dictated and controlled their production. For instance, during the early days of the war of the rebellion, they were largely engaged in the manufacture of military trimmings; in fact, there is no article that could be fashioned from cotton, worsted or silk but has at some time or another been made by them. They have manufactured cords, gimps, braids and tassels for every conceivable purpose; all kinds of fancy headgear, hair nets, chignons, false curls; an endless assortment of neckwear; articles for manufacturing telegraph supplies, for the manufacture of artificial flowers, for theatrical costumers' and for printers' use; coach lace and other trimmings for carriage manufacturers; picture and blind cords, gimps, tassels and other articles used for furniture and house decorations by upholsterers; trimmings for undertakers, tailors, hatters, furriers, milliners and for dress and cloak makers. They have manufactured chenille, velvet, beaded, braided, embossed, watered and every current variety of trimming in vogue during the three last decades. The manufacture of

ladies' dress trimmings was for many years a leading branch of the business, but of late it has been neglected and attention given to ribbon weaving, which has grown to be one of the most important departments of the business. But to Mr. Lambert's foresight and sagacity is due one of the most important additions to the business of the house. In 1874 that gentleman while in England purchased a plant of power looms which were shipped to Paterson and set up in the mill in the space which had been heretofore used as the trimming department. With these looms the firm commenced the weaving of broad fabrics and from time to time they have made additions to the plant until the broad silk weaving equals any department of their business and since 1874 the weaving of "cut up" fancies and dress brocades has been their great specialty.

In 1877 the business was enlarged by the purchase of A. Soleliac & Son's plant of ribbon looms and throwing machinery. These were kept at work in the Dale mill, their original location, until July, 1879. The spring of 1879 witnessed another addition through the purchase of the Sterrett, Ryle & Murphy plant of ribbon looms. December, 1878, found Mr. Lambert engaged in making preparations for the erection of the third, and up to that date, the largest mill, having purchased from the Society for Establishing Useful Manufactures a block of land containing about two acres on the west side of Straight street, bounded by the Erie railway, Clay, Straight and Taylor streets. He proceeded to erect thereon a handsome structure. It is 100x75 feet, two stories, with pressed brick front. The main entrance to the works, the private office, the counting room and the general offices are in the southern portion. This mill was completed and occupied about July 1, 1879, and the removal and placing therein of the outlying plants of machinery enabled the firm to concentrate their hitherto scattered business under one management. The building, constructed after a design of and under the personal supervision of Mr. Lambert, has become generally known as the Lambert Mill, notwithstanding Mr. Lambert's objection to naming buildings, &c., after those who are still in the land of the living.

The lack of sufficient machinery to throw enough silk for the requirements of the firm's business obliged Mr. Lambert to take measures to supply the deficiency. After a careful consideration of the subject he decided on a new departure which was to secure a site and erect a mill in some locality where he could obtain ample water power and secure absence of competition for operatives; a place where the advantages of a large industry and the money which it circulated would be appreciated. Hawley, Pa., was selected as possessing the advantages sought for, and here Mr. Lambert purchased a tract of land lying along the Wallenpaupack river, a stream which divides Wayne and Pike counties, and which at this point is a series of falls and cascades, marvellously beautiful and well worth a long journey to see. On the Wayne county side of the river, upon the rocks at the head of the falls, Mr. Lambert, early in 1880, proceeded to erect his fourth and largest silk mill.

The mill is in shape an elongated parallelogram, broken by a square projection in the front centre; its dimensions are 380x44 feet, the centre projection being 80x80 feet. The firm subsequently, in 1887, also erected another mill of considerable proportions in Honesdale, Pa.

HOPPER & SCOTT.—Among the silk manufacturers of Paterson none have established a better character for energy and business faculty than the firm of Hopper & Scott. The firm started into business in 1879, occupying one floor of the old Hope mill, and operating 1,200 spindles. They devoted themselves exclusively to the throwing of tram and organzine and in a very short time had so great a demand for their work that they could not possibly keep up with it with their limited facilities. They purchased the entire Hope mill property in 1886, and in 1887 erected another substantial mill on it, covering the available ground in front as well as the raceway of the Society for Establishing Useful Manufactures. The firm to-day operates 11,000 spindles, giving employment to 180 hands, and having an annual capacity of 100,000 pounds of organzine and tram. The success of the firm is due to the systematic arrangement which prevails in every part of the mill and to the energy and knowledge of the business on the part of the firm. The original firm was composed of John H. Hopper and Robert W. Scott. The latter died in February, 1890, and Mr. Hopper purchased his interest.

JOHN H. HOPPER was born in the city of Paterson in 1841, being the son of Judge John Hopper. He has always been prominent in business and social affairs in Paterson and is one of the trustees of the Free Public Library, and Quartermaster of the First Battalion.

THE WILLIAM STRANGE SILK COMPANY.—One of the largest silk manufacturing establishments in the country is that of the William Strange Company. Its origin dates back to 1863, when the firm of Strange & Brother—E. B. and Albert B. Strange—who had for thirty years done a silk importing business in New York, established a small mill in Williamsburgh. The firm had no intention of going into the silk manufacturing business but had found that frequently certain shades and qualities of silk ribbons were called for in the trade which had not been imported; to send for such goods to Europe would consume considerable time and so for the purpose of better accommodating their customers the firm set up forty looms to furnish goods which might be ordered and not found in stock. The enactment of the high tariff during the last years of the war and the consequent high rate of exchange induced the firm to seriously consider the question of manufacturing silk on an extensive scale. In 1868 the firm removed its machinery to Paterson and silk manufacturing was begun here under the firm name of William Strange & Co., Mr. E. B. Strange having devoted himself exclusively to importing and Mr. A. B. Strange having turned the business of manufacturing over to his son, although still retaining an interest in the industry. Mr. William Strange devoted himself to a thorough understanding of the business and with characteristic energy soon mastered

it in every branch. The firm had found considerable difficulty in obtaining tram and organzine and for the purpose of being independent of all other similar establishments imported a quantity of silk throwing machinery from England. This together with the looms removed from Williamsburgh was placed in the Greppo mill on Slater street and Dale avenue; the mill was subsequently enlarged but the additions did not keep pace with the demand for the product of the establishment and in 1871 the firm purchased the mill of the American Velvet Company on Essex and Madison streets. The prosperity of the silk industry induced the firm to materially increase the size of the mill; building after building was added and then joined together until in 1878 the firm had a mill extending for two hundred feet on each of three streets, having a depth of forty five feet on Essex street, forty-five feet on Beech street, forty feet on Madison street, and fifty feet on the north, the whole establishment being in the shape of a hollow square. In 1883 another addition was erected to the mill in the shape of a wing on Beech street; this addition is two hundred feet front on Beech street, forty-eight feet deep, three stories high and built of brick in conformity with the rest of the establishment. The mill is complete in every particular, every branch of silk manufacture, from the winding of the raw silk to the finishing of the product, being carried on under one roof. The firm employs about eight hundred and fifty hands. In 1887 the firm was incorporated under the laws of New Jersey and it at present consists of Messrs. William Strange, William C. Kimball, Charles H. Pinkham, Jr., William H. Macy, Jr., Richard Muser.

HAMIL & BOOTH.—There is perhaps no firm of silk manufacturers who have been more successful than Hamil & Booth. The progress has been uniform throughout the years of the existence of the house and from a very humble beginning the firm has attained a position in the front rank of American silk manufacture. The concern was started in June, 1855, in the top floor of the Beaver mill, about twenty hands being employed. The firm was composed of Robert Hamil and James Booth. The product was fringe-silk and soon the demand for it induced the firm to look for more commodious quarters which they found in the second floor of the Star mill. In 1858 they leased the second floor of the Murray mill and had about a hundred and fifty hands in their employ. Here they remained for four years when they purchased a silk mill on Ward street, near Railroad avenue; the mill was equipped with machinery but most of this was removed, it not being of the most approved pattern. The mill was one hundred and thirty feet by forty-five, built of brick, two and a half stories high. The firm continued throwing silk until 1868, when they purchased a number of looms and began weaving. In the meantime they had increased the depth of their mill by twenty feet. In 1870 they erected a frame building, twenty-five by one hundred feet, two stories high. In 1873 their present office was put up, thirty-five by forty-five feet, three stories high. In 1871 they began

the erection of another addition of brick, three stories, forty-five by seventy-five feet. In 1860 the capacity of the mill was further increased by the extension of the building through to Railroad avenue; the addition is of brick, three stories high and one hundred and eighty feet long. In the meantime the firm had acquired another valuable mill property on the corner of Market and Mill streets, fifty-seven by one hundred and ninety feet; this property was bought in 1872 and had previously been used as a cotton mill. The firm now manufactures all kinds of silk and does its own throwing. Over a thousand hands are employed. The firm has always been prominent for the novelty and tastefulness of its designs, continually surprising the buyers. Mr. Hamil died September 11, 1886. Since that time the business has been continued by his representatives and Mr. Booth.

THE RAMSAY & GORE MANUFACTURING COMPANY commenced April 1st, 1886, with a small plant of 1,700 spindles; this in a very short time was too small to meet their growing business. Not being able to find space to put in more machinery they leased the plant of Spanton & Palmer and for eighteen months ran it until they put into operation more spindles. In 1888 they bought the Empire mill in Green street, fitted it up and put in a new engine and boiler, where to-day they run eleven thousand spindles, as well as their original plant of 1,700 spindles in the Watson building; this plant has also grown to be inadequate to meet the ever increasing demand for their work.

The firm have made a specialty of crape twists. They enjoy the reputation of having a thoroughly organized and fully equipped throwing factory, employing only skilled workers. The greatest possible good feeling prevails between the workers and the firm; about 200 hands are employed there and no unpleasantness has arisen since they started in business. Their success has been very marked and rapid, from 300 pounds of silk per week to 3,000 lbs. per week. The Ramsay & Gore Manufacturing Company have fully demonstrated that in Paterson "throwing" can have a place, for plans are on hand for an extension of their already large factory.

John Ramsay, the senior member of the firm, was born in Glasgow, Scotland; his early years were devoted to the study of mining, but that not agreeing with his desires he entered into manufacturing and for fourteen years filled successfully a responsible position in the largest weaving establishment in Glasgow; here he acquired a knowledge of manufacturing in all its branches, which laid the foundation of his success in this country. He came to America in 1870, and started as foreman in the throwing department of the William Strange Company; not having seen silk, nor having had any experience in throwing he encountered many difficulties, but with a determination characteristic of Scotchmen he commenced a study of silk and silk throwing so that he might acquire a thorough, practical and technical knowledge of it in all branches. After close study for six years he accomplished his end. Every day's observa-

tions and experiences were carefully noted down and applied, so that at the completion of his six years study he had accumulated sufficient in writing to run a series of twenty-three articles in the American Silk Journal, on "Silk," "Silk Throwing" and "Silk Throwing in Relation to Weaving." Mr. Ramsay has for seven years held in his own house a small technical school; it was open to all young men who had a desire to learn "silk throwing." Many took advantage of it and now fill important positions; he has always taken a deep interest in young men, and has never turned any one away who has applied for instruction in throwing.

Mr. Ramsay, although busy with the cares of a large mill, finds time still to devote to his favorite study, viz: "Silk Throwing," and is now busy preparing a work for publication on that subject, believing as he does in the imperative necessity of a technical education for the developing of the American silk industry; to that end he labors that some day a technical evening school may be established for those young men who have shown their capacity and ability to excel in one department of silk; such an institution would be of incalculable advance to all concerned in the silk industry.

Mr. Thomas E. Gore, the junior member of the firm, was born in Paterson, N. J., and has been in the city all his life; his first start at work was office boy for Mr. John Ryle, father of the silk industry; having served in that humble position for a few months he was transferred to the spinning room, where for a short time he was a bobbin boy, and then to the deckers, and ever after he has worked in the mills until he became foreman in the William Strange Company's mill. It was while he was foreman that he joined Mr. Ramsay to form the present firm. Mr. Gore for five years was an ardent student of silk throwing, he being associated with Mr. Ramsay in his technical studies. He was one of the most faithful and attentive of men, devoting his whole time to the internal workings of the large mills; by giving his attention to all the branches of throwing he has done much to further the interests of this successful firm. Mr. Gore's life long connection with throwing has qualified him to contribute to the reputation and success of the firm of which he is a member.

THE PHOENIX MANUFACTURING COMPANY.—Among the oldest, largest, strongest and most energetic industrial establishments of Paterson is the Phoenix Manufacturing Company, engaged in the manufacturing of silk fabrics of different character. The charter of the Phoenix Manufacturing Company was granted by the State of New Jersey in 1824 and is one of the few charters in existence in the State of the broad and comprehensive nature that characterized charters granted in the early days, and is irrevocable and unchangeable except as might be desired by its owners.

The company was originally formed for the manufacturing of cotton goods, and for many years in the clipper-built ships which carried the American flag all over the world, in the days when American sea commerce was of greater

relative proportions than now, the sail cloths made by the Phoenix Manufacturing Company were the standard articles used for these white winged ships. With the decline of the cotton industry in Paterson and its gradual transfer to the East, as it became superseded by the finer industry of silk, the Phoenix Manufacturing Company drifted at about the beginning of the war, through the manipulations of Messrs. B. B. Tilt and Albert Tilt, into the exclusive production of silk.

Mr. B. B. Tilt, as far back as in 1835, was of the firm of Tilt & Dowell, and afterwards Tilt & Dexter, in Boston and New York, in the production of gum silks and trimmings. He came to Paterson in 1860 and occupied a portion of the Phoenix mill proper and afterwards additional rooms in the Beaver mill and the old Watson mill. In 1861, by the admission of his son into partnership, the firm became B. B. Tilt & Son and the business was thenceforth largely developed from the manufacturing of gum silks and sewing silks into dress goods in 1870. In 1865, the firm having obtained control of a majority of the shares, became the owners of the charter and properties of the Phoenix Manufacturing Company. This gave them abundant room, splendid water-power and the best of facilities in their line of manufacture. The company was among the first to adopt the use of power looms, and having acquired with the Phoenix Company's property the machine shop which was the original plant operated for many years by John E. Van Winkle and his son Henry, began thenceforth to make their own looms and have continued since to make the power dress goods looms and ribbon looms required for the gradual development of the business. In 1880 the company established the Adelaide silk mill at Allentown and in 1885 doubled the capacity of that plant. In 1888 they established the Tilt silk mill at Pottsville. The raw silk is thrown at Pottsville, woven in plain fabrics at Allentown and in finer Jacquard and fancy work, the most advanced stages of the business, at Paterson. In the three places the company occupies more than three hundred thousand square feet of floor space, equal to about seven acres, and operates over one thousand looms, and employs, when running at full capacity, about two thousand people, being undoubtedly, in its line of hard silk manufacture, the largest organization in the country and one of the most important factors in the production of the great aggregate of nearly seventy millions of dollars produced in the combined output of the silk manufacturing establishments of America.

The products of the Phoenix Manufacturing Company are of a most diversified nature; comprising perhaps, a greater variety than that of any other establishment, and including plain dress goods of all kinds, and the most elaborate brocaded products of the same class, handkerchiefs, mufflers, gauze and pongee goods, ribbons, tailors' linings and silk braids.

The selling agents of the company are Greeff & Co., 22-26 Greene street, New York, an old established firm, three generations in existence, of the strongest financial

ability and highest commercial standing. The trade marks, or brands, of the articles produced by the Phoenix Manufacturing Company have an established and most favorable reputation all over America, and are quoted as staple and standard criterions of the different classes which they represent. Like all silk manufacturers in America, the Phoenix Company was compelled to combat the prejudice in the markets of this country in favor of imported silks. Many manufacturers were actually compelled to imitate foreign labels on the goods in order to effect sales under American tickets. The Phoenix Company pursued the plan of making strictly meritorious goods and placing them on sale under distinctive American labels, in the belief that people would sooner or later appreciate properly real merit, no matter under what brand or wherever the goods might be manufactured, and that the sooner the public ascertained that silk goods could be made in this country equal, if not superior, to those of foreign production and sold for less money, the better it would be for the domestic silk industry. The result has been a constantly growing and healthy demand for goods that can be guaranteed of American manufacture, and under the wise policy of a protective tariff, silk fabrics of nearly all kinds are made in this country and sold for less money than the imported articles of similar construction.

The company has received highest awards for the excellence of its products at the Philadelphia International Exposition in 1876 and the great French Exposition of 1878, and many other industrial exhibitions of similar character.

The present officers of the company are, Albert Tilt, president and treasurer; Joseph W. Congdon, vice president; John R. Curran, secretary. The management of the Phoenix mills in Paterson is, and has been for many years, in the hands of Mr. John C. Dowell; in Allentown Mr. Louis Solebiac is the manager of the Adelaide mills, and in Pottsville Mr. J. M. Harris is the manager of the Tilt mills.

Notwithstanding the great and unusual depression that has characterized the silk business for the past six months, the Phoenix Manufacturing Company has been able to keep the greater portion of its looms in full operation, and there is no doubt that in the future the same energy and executive ability will continue the company in the success and importance which have characterized it since the days when B. B. Tilt & Son came to control it and which has been continued under the most able management of Mr. Albert Tilt, the president, and his assistants.

DOHERTY & WADSWORTH.—The success of this firm presents one of the most remarkable and gratifying instances of what can be accomplished by men who thoroughly understand their business and add to this knowledge energy, industry and fair dealing with all. Less than a decade ago the number of looms they operated could be counted on the fingers of one hand; to-day they rank among the first and most important silk manufacturers of this country. They started into business in October, 1870, in a room on Market street in the building occupied

by the Second National Bank. Their plant consisted of just one loom, but in the course of a few weeks they had added seven or eight. On the first of January, 1880, they removed to the second floor of the Arkwright mill on Beech street, occupying only a portion of the floor space. As their business increased they multiplied the number of their looms until in a short time they had the whole floor covered. In the summer of that year they leased a portion of the lower floor and put in more looms. In June of the following year they took the rest of the first floor, and in 1882 they purchased the whole mill. Being thoroughly acquainted with the industry in its every branch they personally attended to every department; the superior excellence of their product increased the demand to such an extent that the firm saw itself compelled in 1883 to materially enlarge the building; this was done and the firm was in possession of one of the finest and best equipped silk mills in the country, from every part of which proceeded the busy hum of silk machinery of the best pattern and best make. Silk manufacturers from other places who visit the present Arkwright mill agree that it is a model in every respect. The building has a frontage of 211 feet on Beech street, is four stories high; its depth is 50 feet; in addition to this is the boiler and engine house detached from the main building. The ventilation and illumination leave nothing to be desired, both being furnished by power from the engine. The product of the firm embraces everything that is manufactured of silk that is elegant and durable. Some of the finest patterns, copied by other manufacturers both in this country and Europe, emanated from this establishment. For a number of years the firm manufactured more grenadines than all the other firms in Paterson put together. The variety of designs they weave in these delicate fabrics is fairly bewildering, the patterns being of the most exquisite description. Laces and satins and brocades are mingled in the most beautiful combinations and in never-ending variety. The firm employs about 350 hands and it is a well known fact that differences between the employers and employees are almost unknown in this establishment; they have always produced the highest class of goods and paid the highest wages. No firm has done more to place American silks in the high rank they have attained in the marts of the world than have Doherty & Wadsworth. They went on the principle that the best was none too good for the American people and appreciation of this principle and its execution have been shown in the almost marvellous success of the firm.

HENRY DOHERTY AND JOSEPH WADSWORTH. The lives of these two gentlemen have been so intimately connected that it would seem wrong to separate them in furnishing an account of their doings, their struggles and successes. The latter have fortunately always been in the ascendant for it may be said with truth that their struggles were ever crowned with success. They were both born in Macclesfield, England, the cradle of the textile industries of the world. Mr. Doherty was born on February 6,

1850; Mr. Wadsworth on March 10, 1849. The education they received was such as fell to the share of many men who have made their mark in the manufacturing world; literature and the higher branches of education were considered subservient at all times to a thorough schooling in the use of the loom. At an early age both were employed in silk mills; they went to the mill together and in the evening returned to their homes which were not far apart. Their evenings were devoted to study, but it was during the day time that they were fitted for the career which has placed them high up among the manufacturers of the country. They learned the manufacture of silk from the carrying of bobbins to the completion of the finest fabric; there was not a branch of the silk industry in which they were not proficient when they concluded to come to this country. Mr. Doherty was the first to leave Macclesfield for the land of promise across the sea, arriving here in the latter part of 1868. Mr. Wadsworth followed some six months later, arriving here in March, 1869. Both at once came to Paterson and readily found employment in the silk mills where skilled labor was commanding a high premium. They worked in various mills until in 1870 Mr. Doherty was a foreman in the employ of J. P. Mackay and Mr. Wadsworth occupied a similar position in the silk mill of Grinshaw Brothers. Although both commanded liberal salaries they found that others were reaping the larger harvest from their skill and experience and once more they joined their fortunes together which had been linked so often when they were boys. What success attended their combined energy and skill has been inadequately told in the foregoing sketch.

THE BARNERT MILL.—The largest holder of silk mill property in the city of Paterson is Mayor Nathan Barnert. He is not himself engaged in silk manufacturing but the excellent judgment to which he owes the prominent position he has always occupied in Paterson induced him years ago to invest heavily in mill property, he having fully recognized the stability of the industries of the city. The most prominent of his possessions is the Barnert mill an illustration of which is shown on page 104 of this work. The mill is in the shape of a hollow square, four stories high, having a frontage of 200 feet on Grand street and of 125 feet on Dale avenue. It is built entirely of brick and the engine and boiler house is separate from the main mill. There are between seventy-five and eighty thousand square feet of floor space in the mill. Mr. Barnert already owned considerable mill property when 1885 he began the erection of this mill, which is a model in every respect. The steady expansion of the industries of Paterson created a demand for mills and Mr. Barnert's excellent judgment showed him that the dollars he had earned in many years of successful business could not be better invested both for himself and the people who had twice elected him Mayor than by the erection of mills. He accordingly erected the Barnert mill which he rents to a number of silk manufacturers, to whom he supplies both room and power. Mr. Barnert is also the owner of the Dale mill, a superb struc-

ture on Railroad avenue, having a frontage of 325 feet and a depth of 45 feet with an L extension of 100 feet. In addition to this he owns several other mills all located in the square bounded by Railroad avenue, Grand street, Dale avenue and Ward street.

GRIMSHAW BROTHERS.—This firm is composed of three brothers, John, George and David H. They are all three natives of Macclesfield, England, and were raised in the silk business. They commenced business in Paterson in 1871 with half a dozen hand looms in an old shed in Pearl street. They subsequently removed to the Union mill on the corner of Market and Spruce streets. While occupying this mill their growing business compelled them to hire the small mill of James Dunkerley in Spruce street, and this was run in connection with their other mill. These two places not affording the proper facilities, they leased the Arkwright mill, then owned by the Prall estate. This they occupied until they purchased their present property, which was then known as the Greppo mill; it had been formerly occupied by Strange & Brother. Shortly after the purchase they enlarged the mill by the addition of a brick wing a hundred feet long on Prince street. The property now forms a hollow square, bounded by Dale avenue on the east, Slater street on the south and Prince street on the west. It is three stories high, well lighted and ventilated, and amply provided with the most effective appliances for extinguishing fire. It is supplied throughout with fresh well water which is distributed to all parts of the mill from two large tanks in the highest part of the structure. The whole of the mill is operated by the firm.

Having commenced business in the infancy of silk weaving in Paterson, at a time when prejudice against domestic silk goods was strong in the minds of buyers, they worked out a path for themselves—good goods—and have steadily followed it. Commencing with plain surah silks they have followed up about all the avenues known to the silk trade, men's serges and linings, novelties in handkerchiefs and mufflers (of which in fine goods they were the pioneers,) millinery silks, plushes, velvets, plain and novelty dress silks, &c., changing their production with the varying demands of the market. In this connection their lifelong training has been of the utmost value. Their machinery, like their production, has been subject to numerous changes. Commencing with hand machines, as was the custom at the time, they have kept replacing their plant with the most modern machines, until now everything in their vast establishment is of the latest and most improved pattern and the whole driven by steam power. The product of "G. B." as their goods are known on the market, is now largely novelty and plain silks, although in other lines of novelties they do considerable business.

In addition to this establishment they have another mill at Reading, Pa., also of brick, 254 feet long by 50 feet wide and three stories high. This is largely used by them for throwing the raw silk used in their Paterson business. The present Reading mill was rebuilt on the ruins of the firm's former mill, which was wrecked almost totally by

the great tornado which produced such havoc and loss of life in that part of the country on January 9, 1884.

This firm, commencing business with limited means, have by their conservatism and pluck not only withstood all the periodical depressions which have marked the development of the silk trade and their loss by the Reading disaster, but they stand to-day in the front rank of American silk manufacturers.

JACOB HORANDT & SON.—Mr. Jacob Horandt, the senior member of this firm, was born in Sissach, in Switzerland, on April 8, 1831, being one of six children. His father combined farming with silk manufacture, and young Mr. Horandt gained his first impression of the silk industry in the home of his parents. After having passed through the common schools and the advanced technical school of his home, he was at the age of seventeen sent to Basle there to study the practical operation of the manufacture of silk in the factories. He remained there until he was twenty-one years of age, when he returned to his home and was superintendent of his father's silk mill until he was twenty-eight years of age when he was married; he returned to Basle, and until 1872 was foreman in a large silk mill. He then concluded to come to this country, whither his brother had preceded him, and landed here on July 9, 1872. Three lucrative and responsible positions were at once offered him, but Mr. Horandt recognized the fact that there was considerable difference between the silk industry in this country and his native home; before assuming any position of importance he preferred to get acquainted with the status of affairs here, and consequently until January 2, 1873, he worked as a weaver in the silk mills of New York. He was then induced to accept a position as superintendent in the large silk mill of Pelgram & Meyer, and he occupied this position for twelve and a half years. In the mean time his son, Christopher, had grown to be a young man, and having evinced a liking for the silk industry, Mr. Horandt sent him in 1870 to Europe where the young man remained three years, receiving such education as the best technical schools of Europe afforded. On his return to this country he organized the Paterson Ribbon Company with Mr. George F. Kuett. His father at this time concluded to establish business for himself, and young Mr. Horandt having disposed of his interest in the ribbon company joined his father, and the firm of Jacob Horandt & Son was established. It is but natural that the thorough practical knowledge of the industry in all its branches, possessed by both father and son, added to excellent business qualifications, should be followed by success. The firm first leased and subsequently purchased the Hoxsey mill on Kearney street, with its surrounding twenty-four city lots. The first year the firm operated six looms, the second seventeen, the third twenty-nine, and at present their capacity is sixty-nine looms. In the mean time the mill had been increased in size and a dye works had been added; this not proving sufficient, the firm during the present year leased the Meistermann mill in Paterson street, and plans are now being prepared for a new mill on

Kearney street. The firm was the first among the ribbon manufacturers to use electric light, having its own dynamo. Cool and pure water is supplied to every portion of the mill from an artesian well which was sunk shortly after the firm started into business. The selling agents of the firm are Hoenighans & Curtiss, of New York.

In 1880 Mr. Horandt married a second time, his first wife having died, and in 1888 he erected for himself and family the elegant residence, an illustration of which ornaments a page in another part of this book. Both members of the firm are among the most genial as well as accomplished silk manufacturers of the city, and it was a fortunate thing for more than one family in this city that Mr. Horandt concluded to locate in Paterson.

THE PATERSON RIBBON CO.—In March, 1885, this company, of which Mr. Geo. F. Kuett is president, and Mr. W. F. P. Hollingsworth, secretary and treasurer, began business in the Dale mill with a very small capital and only a few looms. To-day they have one of the best plants in the State of New Jersey. Their new mill at Eastside is a substantial structure equipped with all that a model silk mill requires. It is two stories high, fifty by three hundred and two feet, and contains over one hundred and seventy-five windows making it one of the best lighted and best ventilated mills in the vicinity of Paterson. The company sells its goods direct, the office being at 110 Spring street, New York City.

The manufacturing is superintended by Mr. Kuett, who has been employed in the Paterson silk mills since his boyhood and is familiar with all parts of the work. The selling of the goods and the general business of the company is in charge of Mr. Hollingsworth. The company makes high class goods exclusively.

THE AUGER & SIMON SILK DYING CO.—This firm was incorporated under the laws of the State of New Jersey on July 1st, 1890, after an existence of six years. Mr. Charles L. Auger was elected president and treasurer, Mr. Charles Simon, secretary. Mr. Auger is also the general manager. Their business is silk dyeing in all its branches in both colors and blacks. They have nearly four acres of ground on East Fifth street upon which they have built several substantial brick buildings of the latest improved plans adapted to their business. They are equipped with all the modern machinery for blacks and colors. They have a never failing water supply either from the Passaic river or from wells, and have a pumping and filtering capacity of nearly three million gallons per day. Their buildings are all lighted by electricity furnished by their own dynamo. In every respect they have one of the most thoroughly equipped plants in this country. The whole business is under the management and personal supervision of both Mr. Auger and Mr. Simon, who are practical and expert dyers having obtained their knowledge of the business in some of the largest dye houses in this country and Europe. Mr. Auger has proven himself thoroughly capable of organizing and managing in every detail; he has charge of the financial and business portion of the concern,

conducting all the affairs of the company in a straightforward businesslike manner. He is a hard working and energetic man, deeply wrapped up in this business and has proven himself able to cope with any difficulty, as his enterprise and success fully attest. Mr. Simon, who is one of the best black dyers, having held responsible positions both in Europe and this country, attends entirely to the management of the black dyeing. He confines his whole time and attention to the business, giving every detail his personal supervision. His work proves him to be a very careful manager and has gained for him the reputation of turning out a very superior class of work in all grades of blacks which for shade, winding and working in the different processes of manufacturing cannot be surpassed. None but the most competent color dyers are employed who thoroughly understand every grade of fancy dyeing and turn out a very superior class of work. During the ombre season this department was overrun with work and can truthfully claim to having dyed two-thirds of the ombres which were manufactured at that time. A large amount of work in both colors and blacks is turned out daily, furnishing employment to a large number of hands. None but the most skilled workmen are employed in each department under the charge of competent foremen. More than ordinary care is taken with all silk entrusted to this company, who are thoroughly responsible; from the time it is received until its delivery some one fully competent has it in charge. They are in constant correspondence with parties in Europe who keep them thoroughly posted as to anything new relating to the dyeing business. Beyond a question the firm has by shrewd management and careful watching worked its way to a position of importance in the industrial world.

KNIPSCHER & MAASS, SILK DYERS.—This enterprising firm who are located in the Gun Mill yard, have had an extensive experience in both this and foreign countries in the dyeing of silks. Mr. W. E. Knipscher, who is at the head of the concern, was born in Germany, in 1852. He came to this country when but a boy and immediately connected himself with some of the leading dye shops. After gaining a thorough knowledge of the business, he was engaged as foreman of Mr. Jacob Weidman's place at Riverside, where he remained for two years. In 1887 he started in business for himself in the Gun Mill yard, where he has been very successful, doing some extraordinary work in the dyeing of blacks, heavy weight colors, imported blue blacks, spun silks for velvets, etc. In 1890, Mr. Knipscher found that his business was growing very rapidly, and required another practical man to assist him, and accordingly took into partnership Mr. Frank Maass, who is the junior partner of the firm. Mr. Maass was born in New York city, has lived in Europe, and is a graduate from a polytechnic school in Zurich, Switzerland. The firm is a very energetic one, and their dye shop is thoroughly equipped, so that they can do first-class work in a very short time; they are both genial gentlemen, determined to succeed if fair dealing, good work and pleasant manners can lead to success.

JACOB WALDER.—Mr. Jacob Walder was born in Zurich, Switzerland, on March 18, 1839, and after receiving a good education at the common and higher schools of his native place, went to work in a weavers' supplies manufactory for the purpose of learning the trade of reedmaker. After having been employed at this for some time in his home he went to Basle, Crefeld, and Bradford, England, for the purpose of perfecting his knowledge of the branch of industry to which he intended to devote himself. Returning to his home he worked steadily at his trade until he started out in business for himself; after continuing at this but a short time he came to this country in 1856 and at once proceeded to Paterson where he obtained employment as reedmaker. A year later he started into business for himself in a small rear room on the corner of Cross and Ellison streets. Then he removed to No. 93 River street and subsequently to a floor in the mills on River street opposite Paterson street. At each successive place his plant increased but he could never supply the demand for his goods. In 1882 having purchased the property lying opposite to where he had his plant of machinery, he tore down the old buildings and erected a factory especially adapted for his industry. The mill is of brick, three stories high and 50x100. The engine and boiler house is an adjunct to the main building. Having first erected a handsome residence for himself adjoining the mill property Mr. Walder in 1889 erected another mill in the rear of his property; this mill is built of brick, is four stories high and 48x160 feet. Mr. Walder's intention in erecting this mill was to supply a part of the demand for mills by manufacturers anxious to extend their operations. The structure is a model of mill architecture and Mr. Walder has consequently experienced no difficulty in securing desirable tenants.

Mr. Walder's character for energy and uprightness and his thorough knowledge of the business in which he is engaged have made his success both deserved and gratifying. The rank which he has attained in the industrial and commercial circles of Paterson he also holds socially. He is a man of the most pleasant manners and is ever ready to assist his struggling and honest fellows.

I. A. HALL & Co.—Conspicuous in manufacturing circles, and foremost among the great establishments which are devoted to the production of mill supplies in this country, is the widely known house of I. A. Hall & Co., whose extensive factory property is situated at 30 and 32 Division street, with private stables in the rear for the accommodation of horses, wagons, &c., used for local deliveries. The scope of this concern lies in the manufacture of reeds, harness, lingoes, mails, shuttles and general weavers' supplies, as well as the furnishing of Jacquard twines, loom cards, card lacing, &c., and in fact, everything needed in rigging out for the manufacture of textile goods. A special feature is made of reeds, harness, lingoes, &c., for ribbon and broad silk manufacturers, and the employment of only the most skilled labor obtainable, coupled with the untiring vigilance of the various heads of depart-

ments under the general supervision of Mr. Hall, is sufficient guarantee that all work turned out is treated in a most efficient and satisfactory manner, and in such a way as to prove a constant advertisement. The cornerstone of this important industry was laid in 1860, by the father of Mr. I. A. Hall, he being the pioneer in this particular line of trade; but it was not until the present head of affairs acquired control that the business began to rapidly expand, until now it is the recognized leader among its fellows, but still with the cry of "enterprise and progress" as its motto. The products of this popular firm are well and favorably known throughout all districts where textile fabrics are manufactured, and an adequate idea of the extensive character of their output may be gained from an inspection of their large and handsome three-story brick mill, a picture of which appears on another page, and in which a large number of operatives are steadily employed at remunerative wages.

ISAAC A. HALL.—The subject of this sketch was first introduced to the light of day on the 9th of October, 1860, in the city of Paterson, and he has resided here almost continuously ever since. His boyhood days were passed in much the usual manner, his fun loving disposition assuring him of good times in those hours not spent in the public schools of the city, in whose halls his early educational teachings were received, supplemented by a thorough course of practical business training in that excellent institution, Latimer's Paterson Business College.

In the spring of 1879, he entered the naval service of Uncle Sam, and for one year served on the historical old war ship *Constitution*, U. S. S. *Minnesota*, &c. Seeing no prospect of any considerable advancement, however, and the monotonous life on shipboard becoming irksome to his energetic makeup, he sought the assistance of President Hayes, and securing his signature to the necessary papers, he was honorably discharged.

Upon returning to his native city, his marked ability and enterprise found a fruitful field of labor in the business founded many years before by his father, (who had died some time previous to this period) and under his skillful guidance the industry has risen to a prominence second to none in its line.

Personally, Mr. Hall is a gentleman of genial and entertaining manners, and while he makes business his first study, he still finds time to pleasantly discharge those social duties which are incumbent on him, and to take an active interest in Masonic and other affairs, in whose circles he is a prominent and popular figure.

THE BARBOUR FLAX SPINNING COMPANY.—The Barbour family have for a century been among the greatest linen manufacturers in the north of Ireland, their works at Lisburn, near Belfast, being among the largest of the kind in the world. Their establishment at that place is complete in itself. Not only is the flax subjected to every process involved in the manipulation of the raw material from the crudest state, but the firm have immense machine shops of their own where they build all the machinery they

need on either side of the Atlantic. For many years they had made large sales in America, Thomas Barbour having charge of their New York house. The imposition of the tariff of 1802 and the high rate of exchange led them to conceive the idea of establishing a branch of their immense factories in America, and looking about they concluded that Paterson was the most available place in which to locate. Thomas and Samuel Barbour carried the project into execution and in 1804 they bought the old Passaic mill No. 2, formerly run by John Colt for the weaving of fine sheetings and cotton duck, on Spruce street, opposite Oliver. The mill was a fine structure, though but a toy house compared to the mills at Lishurn. Here they employed several hundred hands and added continually to their machinery until the building could hold no more; they enlarged it from time to time but still they lacked room. Having bought the entire block bounded by Prince, Grand, Spring and Slater streets, they proceeded in 1877 to erect thereon one of the finest specimens of mill architecture in New Jersey. It was fifty feet front on Grand street by two hundred feet deep and four stories high. The engine and boiler house is a very spacious building, while the chimney, octagonal in shape, and relieved at frequent intervals by light-colored belt courses and surmounted by a broad cornice at an elevation of one hundred and eighty feet, is ornamental as well as useful. But it is the inside of the mill that impresses the visitor with a sense of security and solidity. The stairways are all enclosed in solid brick walls and are themselves of brick and stone. Massive wrought iron beams span the interior from side to side and on these are built brick arches which support the floors above. These floors are of bluestone flags, inclining from the centre to the side walls, so that they can be readily flushed with water, which then runs off in gutters provided for the purpose. This is the style of construction throughout. The building, if not absolutely fireproof, is as nearly so as the ingenuity of man can make it. It is not easy to see where or how a fire could make much headway in such a massive structure with so little for the flames to feed upon. But flax is a very inflammable article, and the danger of fire has been foreseen and provided against in other ways in addition to making the building itself proof against flames. On each floor and on each side are hid patent sprinklers, so constructed that at a certain degree of temperature they will open innumerable valves and throw all over the room copious jets of water propelled with all the force that a head of one hundred and eighty feet can give. There are two appliances also for throwing water into any part of the mill. The water is supplied from a pond on Garret Mountain one hundred and eighty feet above Grand street. This magnificent building had scarcely been occupied and scarcely was the machinery brought over from their works in Ireland before they set about doubling its size, and in 1878 it was made as long again, so that it is now fifty by four hundred feet in area, four stories high. In February, 1874, the Spruce street mill was destroyed by fire. It was

at once rebuilt in imitation in all respects of the Grand street mill. Water and steam are both used for power and both mills are heated by steam. During the year 1881 they built another immense stone mill on Grand and Morris streets, forty-eight by four hundred feet; the mill is known as the Granite Mill, from the stone used in its construction. This mill is leased to a number of silk manufacturing concerns.

Within four years after establishing their mill in Paterson, or in 1808, they were making about fifty-two thousand pounds of shoe thread, saddlers' thread and gilling twine every month—twenty-six tons of thread. They were also making about a ton of fine thread for the manufacture of hose. In addition to this product they spooled four thousand dozen spools monthly of the thread made by them in Ireland, and spooled seventy-five thousand pounds of tailors' thread, also made abroad. They now import the flax just as it comes into the market from the farms in the north of Ireland, where that crop has so long had its favorite home, and in their Paterson mills they hackle, dress, and spin it into all kinds of linen thread, shoe thread, sewing thread for tailors' uses, fine twine, &c. They also dye and bleach it on their own premises. They spin thousands of miles of thread every day, enough to put a girdle around the earth twice over. That means fifty thousand miles daily. It is needless to say that they have the most improved machinery to be had in the world. They have their principal store and office in New York city, with branch offices in Boston, Chicago, San Francisco and other cities. The business was originally in the name of the Barbour Brothers—Thomas, Robert and Samuel—but in 1860 they were incorporated as the Barbour Flax Spinning Company, and the industry has been carried on since that date by that corporation. The president is Robert Barbour; Thomas Barbour was vice president and treasurer until his death when his interest in the corporation was transferred to his son William.

THOMAS BARBOUR was born on July 14, 1832, in the old family residence at Hildon in Ireland. He became an American citizen in 1850. He was a man genial in manner and the very embodiment of hospitality and influence; when any question arose demanding unusual energy he was never found unequal to the emergency of the case. He manifested a force and vigor of character difficult to oppose. He persistently refused public position but was connected intimately with many public and private enterprises of importance. He was a member of the Committee on Revenue Reform of the New York Chamber of Commerce and is widely known in this country in connection with his successful defence of his firm and government on the infamous moiety system, and is recognized as the one who, by his personal sacrifices and exertions, caused the abrogation of a law which offered a fifty per cent. premium on official irregularity and imposition. He delivered a forcible and practical speech on the subject before the New York Chamber of Commerce in 1874 and on the following evening at Steinway Hall at a special meet-

ing called for that purpose. Mr. Barbour subsequently proceeded to Washington and procured the passage of the bill abrogating the moiety system. Upon a subsequent visit to Belfast, Ireland, on October 29, 1874, he was tendered a public banquet by the merchants of Belfast and the province of Ulster, at which the Lord Mayor presided, in recognition of the important service he had rendered to the importing trade of New York and capitalists in breaking down a system so unjust in principle. Mr. Barbour was the first president of the Paterson Board of Trade, a director of the Hanover National Bank, a director of the Guardian Fire Insurance Company of New York, and a director of the Paterson & Ramapo railroad company. He was president of the Bedford Manufacturing Company of Newark and for ten years a director of the Clark Thread Works of Newark. He owned a large amount of property in Paterson, including a fine residence on the corner of Straight street and Broadway. His summer residences were the Brookside Farm at Preakness and "Warren Point," the latter situated in Bergen County, just across the Broadway bridge. At the latter place on different occasions he entertained General Grant and other prominent citizens of this country. He was always regarded as one of the most liberal minded and public spirited citizens of Paterson. His death occurred at the family homestead in Ireland on January 16, 1885, and was lamented by all who had ever had the pleasure of his acquaintance.

THE DOLPHIN MANUFACTURING CO.—This company was incorporated in 1843 under a special charter as the "American Hemp Company," but as its antecedents and its capital came from Scotland it was familiarly known as the "Scottish Company." In February, 1856, as its business was making sail-canvas, the present name suggestive of the sea was adopted. John Taylor Johnston, Esq., former President of the Central R. R. of New Jersey, was one of the original incorporators and is to-day a director and the largest stockholder. Alexander F. Van Nest, Esq., of New York city represents the next largest holding and is also a director. The remaining directors are Robert W. de Forest, Esq., counsel for the Central Railroad of New Jersey, and Mr. Otto F. Bannard and Mr. J. Herbert Johnston, who are respectively president and vice president of the company. The manager of the mill is Mr. Henry Brown, formerly of Dundee, Scotland.

The property extends about 125 feet on Spruce street, near Oliver, and runs back nearly 600 feet. The operatives number about 800, nearly three-fourths of whom are Scotch and as Mr. Brown is a Scotchman, the term "Scottish Company" might still be appropriately used. Both water-power and steam-power are used in running the mill, and an electric lighting system has entirely displaced gas. An ample storehouse was built last year to accommodate the supply of raw material imported from India, and the new machinery is being constantly added to replace the older and less productive patterns. Nearly 5,000 tons of jute are manufactured each year in the "Dolphin" besides twine, for the grain fields, carpet

yarns, hemp carpets, napier mattings, upholsterers webbing, canvas, burlap, sash cord, and miscellaneous twines. The present customs duty of twenty per cent. upon the raw jute has enabled Dundee competition to interfere seriously with certain branches of the jute industry such as carpet yarns, but hopes are entertained that Congress will soon remove this burden so that America may obtain jute as cheaply as Scotland and Canada. No jute is raised in this country. If such relief should be afforded to the jute industry the possibilities for manufacturing will be great as the use of jute in various articles is increasing and relatively few jute goods are made in this country.

The "Dolphin" as the pioneer jute mill of America is keeping pace with the progress of the times and each decade will find the growth and development of these mills closely following the growth and development of the United States.

THE ROSWELL BOBBIN MANUFACTORY.—The Roswell Bobbin Manufactory, named after the late Roswell L. Colt, was established in February, 1858, upon a comparatively small scale by Isaac Scull, John R. Daggers and William Row. After the death of Mr. Scull in 1864 the business was continued by the surviving partners until the year 1880, when, owing to the sickness of Mr. Row, the partnership was dissolved and the business continued by the present enterprising proprietor. Since then it has steadily increased and developed into one of the largest of its kind in the state. The factory occupied by Mr. Daggers has a frontage on River street of fifty feet and on Mulberry street of 120 feet, two-thirds of which is a three-story brick building and the remainder a two-story frame structure, fully equipped with improved designs of wood-working machinery for the manufacture of all kinds of silk, cotton, manilla, hemp, jute, flax and woollen bobbins, spools and similar articles used by manufacturers of textile fabrics. Mr. Daggers also devotes especial attention to wood turning in all its branches and employs from 25 to 30 experienced and skilled operatives. His products are shipped direct to consumers and manufacturers of textile fabrics in all sections of the United States, and through jobbers, dealers and machine makers to all parts of the world.

JOHN R. DAGGERS was born in Preston, Lancashire, England, on July 7, 1817. He came to this country in March, 1834, and in the same year began his apprenticeship as machinist with Rogers, Kernan & Grosvenor. He was subsequently employed in running cotton machinery in the south, notably in Alabama and Georgia, and superintended a number of these plants for some years. In 1850 he was appointed by judge of the courts of Passaic County and served five years. He was again appointed to the same position in 1877 and served another term of five years. Mr. Daggers has always been one of the most prominent and public spirited citizens of Paterson. Pleasant in disposition, upright and fair in all his dealings, he continually makes friends without ever losing any. As a Judge he was one of the most useful members of the

bench; he was ever ready to listen to the plea for mercy and no matter how degraded the criminal arraigned before him Judge Daggers was ready to listen to a kind word for him; his natural disposition inclined him to mercy and many convicted culprits owe to Judge Daggers the last chance which justice afforded to enable them to retrieve their lost reputations.

FREDERICK HARDING.—A prominent and progressive establishment in this city engaged in a useful and growing industry is that of Mr. Frederick Harding, a manufacturer of paper boxes. The industry was established in 1872 by Mr. Harding and he still maintains the supervision over the business assisted by his two sons, Albert James and William Frederick, who are both capable and energetic young men, having a thorough knowledge of the various branches of the business acquired under the tutelage of their father. The premises occupied comprise the entire structure Nos. 200 and 202 Straight street. The building is of brick, 100x60 feet and three stories high. It is fully equipped with the most improved machinery and appliances known to the trade, including the patent box stripping machines which greatly facilitate the covering of boxes and the laying on of the paper with mathematical precision. Thirty expert operators are employed and the machinery is driven by steam-power. Mr. Harding manufactures all sizes and different kinds of plain and fancy paper boxes, his output being unrivalled by that of other first-class houses; he supplies a large number of factories in this city, New York, Newark, Passaic and other places. The cutting of blank Jacquard and Dobby cards for silk manufacturers and blank cards for carpet, damask and tapestry manufacturers, in all sizes and qualities, is a specialty and as many as twenty tons of this material are turned out monthly. Of late years Mr. Harding has introduced great improvements in the methods of paper box manufacturing, both as regards the rapidity with which boxes are produced as well as the increased beauty of the style and designs. Mr. Harding promptly gives estimates for any style or size of boxes, either plain or fancy, in any desired number and colors. The capacity of the factory is from three to ten thousand boxes a day and all orders are filled at the shortest notice.

FREDERICK HARDING was born in Melksham, Wiltshire, England, on February 7, 1836. He attended the public schools of his native place until he was thirteen years of age. He then came to this country with his brother Alfred, and went to Rockville, Conn., where he worked in the woollen mills until he was seventeen years of age. His brother James had enlisted in the Union army and came home on a thirty days furlough, having served two years and five months. Before this furlough expired Mr. Frederick Harding had enlisted in the same regiment, which had been raised in Hartford, and went to the front, his enthusiasm in the cause of the Union being so strong that he did not wait until his brother accompanied him. He was one of the youngest volunteers in the army. He served under Generals Butler and Ord and

took part in the engagements near Richmond and Petersburg. He remained in service until the close of the war and was discharged in October, 1865. Neither he nor his brothers sustained any wounds. At the close of the war Mr. Harding returned to England on a visit; his mother had died in the mean time; his father died when Mr. Harding was but six years of age. While in England he was married to a former schoolmate of his. He brought his bride with him to this country and returned to Rockville, where he again found employment in the woollen mills. After working for a few months, in 1867, he went to Newark, N. J., where he worked for some time at file cutting and wrench making, after which he was employed in a paper box factory. In 1871 he came to Paterson and started in business as a paper box manufacturer. His energy and industry, supplemented by excellent business qualifications, ensured his success, and he stands to-day prominent among the manufacturers and public spirited citizens of Paterson. He is well known for his pleasant and genial manners. He has a fine suburban residence at Haledon, an illustration of which appears on another page.

PATERSON, DRAIN, SEWER AND WELL PIPE WORKS.—This establishment is located at Nos. 118 to 128 Park avenue, and is owned by Mr. Joseph Sharpe. It is one of the foremost establishments of its kind in Paterson, its success being due to the energy and excellent business qualifications of its proprietor.

It is only about twenty years since cement drain pipe was first introduced to the public, and though it has met with the natural opposition that any new and important invention always meets, it has steadily gained in popular favor, until to-day its manufacture has become a very important industry; in fact, the extent to which it has been used under the most severe tests of exposure, has so satisfactorily proven its durability that manufacturers have been led to mould this cement into other useful articles, among which may be mentioned horse blocks, flagging for sidewalks, copings, sills, lintels, curbings, etc., for all of which purposes and many others its practical utility has been thoroughly tested.

This branch of industry is prominently represented in Paterson by Mr. Joseph Sharpe, who has conducted the manufacture of cement drain, sewer and well pipe here since 1865, with annually increasing success. The manufacturing plant covers about one acre, upon which is erected a two story frame factory, which is equipped with all necessary appliances for the work in hand, from ten to twenty workmen being employed in the manufacture of the product. These works are the most extensive of the kind in the State and enjoy a reputation second to none for the style and quality of the product.

Many years of practical experiment and study on the part of the proprietor of these works have resulted in great improvements, both in quality and design. Mr. Sharpe has obtained a patent on the processes of manufacturing cement pipe, which greatly adds to the quality of the pipe

made by this establishment, this process not being used by any other manufacturers in the country. In the manufacture of this cement pipe, Portland cement is used exclusively, making a pipe of great strength in a few days: the older the pipe is the harder it grows, eventually becoming as hard as the hardest rocks: it is warranted to last as long as the earth in which it is laid.

For drainage of every kind, acid and acid washes, or in short liquid matter of whatsoever description, these cement pipes are the best in the market.

The trade of this house extends throughout a radius of one hundred miles of Paterson, on the several railroad connections, where agencies have been established and stocks of greater or less dimensions are carried in store.

ISAAC D. BLAUVELT.—The Blauvelt family resided in Rockland County, N. Y., at an early date. Thomas Blauvelt, the great-grandfather of the subject of this sketch, was a justice of the peace of that county for many years and transacted a large amount of public business. He removed to Pompton, Passaic County, N. J., at an early period, where he operated a grist-mill and engaged in agricultural pursuits. His son Daniel succeeded him at the same place and followed the same line of business.

Isaac D. Blauvelt was born on September 6, 1827. His father was a shoemaker by trade and followed that pursuit in the city of Newark for several years. Mr. Blauvelt received only an ordinary English education and at the age of sixteen began to learn the trade of carriage making with Isaac Riker, of Little Falls. After about a year he entered the employ of John Gardner, of Newark, and a short time afterwards of John D. Hogan, of Paterson, with whom he finished his apprenticeship and remained two years. He then went to work in the carshops of the Paterson & Hudson River railroad, which stood on the present site of St. John's Catholic church, where he remained two years in the wood working department. He then established the carriage business in a small way in Arch street, near North Main. He remained at this point for about four years and succeeded by close application to business in building up considerable trade and in making a reputation for himself in connection with the manufacture of carriages. Owing to the necessity for increased facilities for manufacture he removed his establishment to River street, nearly opposite the Passaic Hotel, where he remained for a number of years. In 1890 he removed to the corner of Market and Prince streets and continued at that point until 1895, when he was burned out, and having no insurance, suffered a loss of about seven thousand dollars. In the same year he purchased from the Society for Establishing Useful Manufactures the site of his present factory on Paterson street and erected the building. He has since been engaged in the general manufacture of carriages and sleighs of all kinds at that point and has the largest establishment of that kind in Passaic County. He does a good class of work and is carrying on a large and successful business.

Mr. Blauvelt has confined his labors closely to his business and engaged but little in public affairs. At the same time, while no aspirant after political preferment, he has been called by his fellow citizens to fill several positions of importance. He represented the North Ward in the Board of Education for three years, and was a member of the Board when the present school system was organized. He was alderman from the same ward for two years and filled that position at the breaking out of the war. He also represented the Third District of Passaic County in the State legislature for two years.

WILLIAM L. BAMBER.—The business conducted by this gentleman cannot be better described than by the following extract from the *Scientific American*:—"The leading house in Paterson, N. J., and probably in the State, engaged in the manufacture of all kinds of marble and granite work is Mr. William L. Bamber, of 30, 32 and 34 Willis street. The business was originally established by Mr. David B. Bamber in 1812, and after his death, which occurred in 1875, his son, Mr. William L. Bamber succeeded to the business, when the present style of the firm was adopted. Mr. Bamber is regarded as an artist in his profession, and some of the finest work as seen at the Cedar Lawn Cemetery and elsewhere emanates from his establishment. As an instance special reference may be made to a monument erected in memory of his father. It is a magnificent piece of sculpture representing a life size figure of Mr. David Bamber in pure white marble, resting on a pedestal of eight feet in height. It forms one of the great attractions of Cedar Lawn Cemetery. Mr. Bamber gives attention to all kinds of monumental work, and at his atelier may be seen beautiful specimens of monuments, headstones, statuary and memorials, all of tasty designs and embodying artistic conception to a high degree. His studio and workshop is well arranged and equipped with a variety of valuable appliances. A considerable force of artisans are employed all under his personal supervision. It is the aim to furnish strictly first-class work at reasonable prices so that the public taste may be both gratified and educated. An active business is being done, with a tendency to increase. Designs and estimates are supplied whenever required. Mr. Bamber, it may be stated, is a gentleman in the prime of life, a thorough artist and an able business man; his success is the natural consequence of the manifestation of ability, intelligence and integrity, and the genuine courtesy which is extended to all is another factor of the greatest importance."

THE HINCHLIFE BREWING AND MALTING COMPANY.—This company was incorporated the first day of May of the present year, the members of it being the same as composed the brewing and malting firm known, in this city for years as Hinchliffe Brothers; they are the three sons of the founder of the old Eagle Brewery, who began business in the year 1861. In that year Mr. John Hinchliffe leased the old "Archie" Graham brewery; having a practical knowledge of brewing he established the business under the title of Hinchliffe & Co.; he subsequently associated himself

with Mr. John Shaw, a fellow countryman, and afterwards a leading and popular citizen. The lease having expired Mr. Graham recommenced business and the firm of Hinchliffe & Co. established an agency for Cox's then celebrated ales, until they could erect a suitable brewery for themselves. In 1867 the present Eagle ale and porter brewery was built; they then admitted a new member to the firm, Mr. Thomas B. Penrose, also an Englishman from Yorkshire, an experienced practical brewer and conceded to be one of the best brewers in the United States at that time; the firm name was then changed to Shaw, Hinchliffe & Penrose. Each member was suited to his particular department and the concern did a thriving and successful business. In 1872 to meet the requirements of their increasing trade and to enable them to insure a constant supply of the best malt they erected the extensive malt house which stands in the rear of the property; it is a massive brick structure 150x75 feet, six stories high, with slated roof; a switch from the New York, Lake Erie & Western Railroad runs into the building where are unloaded thousands of bushels of barley daily coming from Canada, New York State and western points; the capacity of this house, which is the only one in this vicinity, is over one hundred and fifty thousand bushels of malt per season; it is one of the most substantial and best equipped malt houses in the State; it is supplied with the best well water, free from lime and other objectionable ingredients, and deserves the widespread reputation it has of producing the finest malt. This department is under the efficient management of Mr. Henry Coley, for years maltster at the H. B. Manning malt houses in Buffalo.

In the year 1878 Mr. Penrose retired from the firm, the original parties, Shaw & Hinchliffe, buying out his interests and leaving his pupil, Mr. William F. Hinchliffe, in charge of the brewing department.

In 1881 Mr. Shaw was compelled to go abroad for his health, but instead of improving he gradually became worse and died.

This left the founder of the business alone and under the firm name of John Hinchliffe he conducted a very successful business until his death, September 1st, 1886, he then being in his sixtieth year; he was buried at the Holy Sepulchre Cemetery, his remains being borne to their last resting place, in compliance with his request, by his oldest and most trusted employees. He had been all through his life a hard working man, strictly honest, conscientious and benevolent; he left two daughters and three sons, his wife having died a few years before; he was devotedly attached to his family and during the sickness before his death assigned and deeded all his real and personal property to them; the brewery property he gave to his sons, John, William F., and James C., who shortly after their father's death began business under the firm name of Hinchliffe Brothers.

These young men, having been trained up by their father in the different departments of malting and brewing, were thus properly fitted to continue the business and

began, firmly keeping in view the good business example of their father. Having retained the reputation made by their predecessors up to this for fine ales and porters, their "Original B" especially being noted, and knowing that the demand was increasing for the popular cool lager beer, they resolved to accede to their customers' wishes and add to their already extensive plant a model lager beer brewery. With this end in view they consulted the well known firm of Charles Stoll & Son, brewery architects of Brooklyn, who soon had plans and specifications drawn for the largest brewery of its kind in the city; with their usual push and energy they immediately began to tear down old buildings and prepare for the new and model ones.

After eight months had gone by they had completed the lager beer brewery which is shown in the engraving as taken from the front elevation of the architect's plans. The storage and brew-house is five stories high, built of brick and iron trimmed with granite from the Mount Adams Granite Co. In the rear is a three-story ice factory in which there is one of the De la Vergne ice machines with a capacity of 65 tons, which besides being capable of refrigerating the entire plant is able to supply a large amount of artificial ice; it is the most improved machine and is used with the "direct" system. These buildings and two smaller ones constitute the lager beer brewery, which is said to be the heaviest building in the city; the iron work, of which there is a large amount, was contracted by the Watson Machine Works and the Passaic Rolling Mill. The copper work contained inside was also a large contract, being executed by August Roos's Sons, copper-smiths of New York.

The casks, tanks, tubs, &c., which are necessary in a well regulated brewery that the beer may have the proper age, were erected by Smith & Son, of Philadelphia, and J. Schwarzwald & Sons, of New York; Mr. David Henry, of Paterson, carpenter and builder, and Mr. Samuel Riley, mason, also of Paterson, have the gratification of looking upon a beautiful structure built largely by their hands.

The capacity of brewing is about 75,000 barrels per year. The brewery is under the direct supervision of the company, which is composed of John Hinchliffe, president; William F. Hinchliffe, vice president, and James C. Hinchliffe, secretary and treasurer, who own equal shares of stock.

Besides the brewing and malting business they are interested in several land companies, and are generally active.

THE PATERSON CONSOLIDATED BREWING COMPANY. — During the year 1881 representatives of an English syndicate made overtures to a number of the brewers in Paterson to purchase their entire establishments for the purpose of forming a stock company and disposing of the stock in England. After long and tedious negotiations the project fell through, but it had not been without fruit. The negotiations had brought the brewers closer together and they recognized the benefits to be derived from concerted action among men having an identity of interests. The result was the formation of the Paterson Consolidated Brewing

Company by the proprietors of four of the largest breweries in the city. The company now owns the breweries formerly under the personal management of Christian and Louis Braun, Sprattler & Menzell, James A. Graham & Co. and the Katz Brothers. These gentlemen now share with each other the enormous advantages to be derived from large purchases, a general surveillance of the business under one management and the numerous other benefits derived by an amalgamation of interests. The officers of the company are the following: Bernard Katz, president; Philip Katz, first vice president; James A. Graham, second vice president; Christian Menzell, treasurer; Louis F. Braun, secretary; Christian Braun, general brewer. Following are sketches of the various breweries owned by the consolidated company:—

THE BRAUN BREWERY OF THE PATERSON CONSOLIDATED BREWING COMPANY.—In 1855 Mr. Christian Braun, father of Messrs. Christian and Louis F. Braun, started a brewery on the corner of Braun and Marshall streets and conducted the business with increasing trade and success until the year 1870, when he leased the business to Sprattler & Menzell. Mr. Braun died in 1876 and his sons took possession of the business. They were young men of excellent business qualifications, liberal and pleasant, and they soon built up a business second to none in the city. The brewery was increased until they had a structure 75x200, three stories high, equipped with all the latest improved appliances for the production of a superior grade of lager beer; the capacity of the brewery is 60,000 barrels per year. Every facility and advantage, which long experience and a thorough knowledge of the business could bring to bear, was used, and all the operations of the business were conducted under the immediate supervision of the proprietors, who are experienced and practical brewers. In 1888 a 25-ton ice machine was put in and this was supplemented after the consolidation had taken place, by a 50-ton ice machine. At present work is in progress for the erection of a new brew house, five stories high, 42x11, built of brick and ornamented with brown stone. A handsome malt tower, having a capacity of ten thousand bushels of malt, will surmount the building which will be one of the finest and most costly in the city. From the ground to the top of the tower is a distance of 114 feet. The brewery when completed will have a capacity of 150,000 barrels of beer per annum. An engraving of the building as completed is presented on page 181. On the opposite side of the street are the stables, where the twenty horses used in the business are housed.

THE SPRATTLER & MENNELL BREWERY OF THE PATERSON CONSOLIDATED BREWING COMPANY.—Mr. Gustav Sprattler and Mr. Christian Menzell established the brewing of lager beer in Paterson in 1870, having leased the brewery up to that time operated by Mr. Christian Braun. Here they laid the foundations for the splendid trade subsequently controlled by the house. In 1876 they took possession of a new brewery, which they had erected for the purpose and which at that time had a capacity of 8,000

barrels per annum. In the succeeding years enlargements of the plant were made and new buildings erected until the brewery is one of the most complete in all respects in New Jersey, having a capacity of 10,000 barrels per annum. The plant covers an area of 185x200 feet, upon which are erected ice houses, brewery and malt houses, store-houses, &c. It is equipped with all the latest improved machinery and appliances. In 1887 a 25-ton ice machine was added, being the first of its kind in the city of Paterson. Mr. Sprattler died in October, 1885, and the business was conducted by his estate and by Mr. Menzell until the consolidation took place in 1890, when the interest of the Sprattler estate was absorbed by the company. Owing to the great scarcity of ice the consolidated company concluded to erect an ice plant and for this purpose a brick addition, 50x65, was added to the brewery. In this building was placed a 50-ton ice machine which has produced thirty tons of ice a day for some time, the ice being used by the various brewers, when they stood in need of any in addition to their respective ice plants, and is served to the customers of the consolidated company.

THE GRAHAM BREWERY OF THE PATERSON CONSOLIDATED BREWING COMPANY.—Among the most experienced brewers in the State is Mr. James A. Graham. He was employed in a brewery early in his life and learned the business thoroughly in every department. For nine years he was superintendent of a large brewery in Paterson and in 1887 he concluded to go into business for himself. For this purpose he purchased a tract of land lying on Cedar street and running from Straight street to Ramapo avenue. This gave him a very desirable location, being in the centre of the city and adjoining the tracks of the New York, Lake Erie & Western railroad. On this he erected a substantial brewery having all the modern appliances and machinery. The building is three stories high, built of brick and has a frontage of 90 feet and a depth of 100 feet. The engine and boiler house is separate from the main building and its dimensions are 25x33 feet. The stable attached to the brewery is 60x60. All that was needed to make the project a success was a supply of pure water and this was obtained by the sinking of an artesian well. A number of very deep wells had been previously sunk in various parts of the city and all had yielded an abundant supply of pure water, so that the sinking of the well was not an experiment. Mr. Graham's business was a success from the start, just what his friends had anticipated. He had the knowledge, the energy and the necessary business qualifications and was in possession of a well equipped brewery. The demand for the product of the brewery at once taxed the resources to their fullest extent and there has not been an idle day at the establishment since it was started. In addition to a large home trade Mr. Graham soon built up a trade outside of the city until his ales and porter are well known throughout this part of the State.

THE BURTON BREWERY OF THE PATERSON CONSOLIDATED BREWING COMPANY.—No industry has ever met

with more remarkable success than the industry of Philip and Bernard Katz, who for a number of years conducted the brewing business under the firm name of Katz Brothers. It was more by accident than by design that they embarked in the brewing business but once engaged in it they gave to it all their energy and attention and they soon ranked among the most successful and best known brewing firms in the country. They began brewing in July, 1877, on the corner of Godwin and Bridge streets, where their capacity was twenty-five barrels per day. The only difficulty they experienced was that they could not supply the demand for their product. While they were contemplating the erection of a new brewery or looking for some way in which their establishment could be increased so as to meet all the demands made upon it the Burton brewery was offered for sale. This brewery had been erected only a very few years; it stood on Straight and Governor streets and had been built by the Burton Brewing Company, an organization composed of men of means who, however, had had very little experience in the particular line of business in which they found themselves engaged. Dissensions among the stockholders and other difficulties arose and the company finally resolved to go into liquidation. They owned one of the finest breweries in the State; no expense had been spared in its erection and equipment, but even with all these advantages the business proved a failure and the company was glad to find a purchaser. A wonderful change came over the order of things when Katz Brothers took possession. They thoroughly understood the business in which they were engaged and in place of dissensions came perfect unity. Soon even this

large brewery became too small for the demand. It was purchased in 1882 and since then not a twelvemonth has passed that did not see some material additions and improvements. Their XXX and Canada Malt Ale and other brands were in such demand wherever they had been introduced that the firm soon found it necessary to open stores in New York and other cities and their renown as brewers ceased being provincial or local and became national. From all parts of the United States came orders for Katz Brothers' ales and porters. Having met with this almost phenomenal success in the brewing of ales and porter they concluded in 1888 to undertake the brewing of lager beer and for this purpose erected a substantial addition to their already large establishment. Their experience in the brewing of beer was a repetition of their previous experience. From a small beginning in twelve years the Katz Brothers found themselves in possession of a business for which an English syndicate offered a round million of dollars. Their brewery has a frontage of 200 feet on Straight street, 300 feet on Governor street and 300 feet on Harrison street; it has an annual capacity of 1,300,000 barrels.

There is one feature which has been remarkably prominent in this firm and which has undoubtedly contributed a great deal towards their success and that is the unity in which the two members of the firm act together. They are both active and enterprising but the undertaking of one is always shared by the other. Their purposes are always combined and in the execution of them each takes an equal share. Brotherly affection and unity was never better exemplified than in the firm of Katz Brothers. Their mother aged 82, still active and cheerful, resides with them.



— ❧ — PORTRAITS AND RESIDENCES. — ❧ —



JACOB V. ACKERMAN



FRANK W. ALLEN



JAMES BELL.



DE WITT C. BOLTON.



JOHN F. BUCKLEY.



RESIDENCE OF MR. ROBERT BARBOUR



SUMMER RESIDENCE OF MR. WILLIAM BARBOUR.

PHOTOGRAPH BY H. C. H. C.



RESIDENCE OF MR. E. T. BELL.



JOHN J. BROWN.



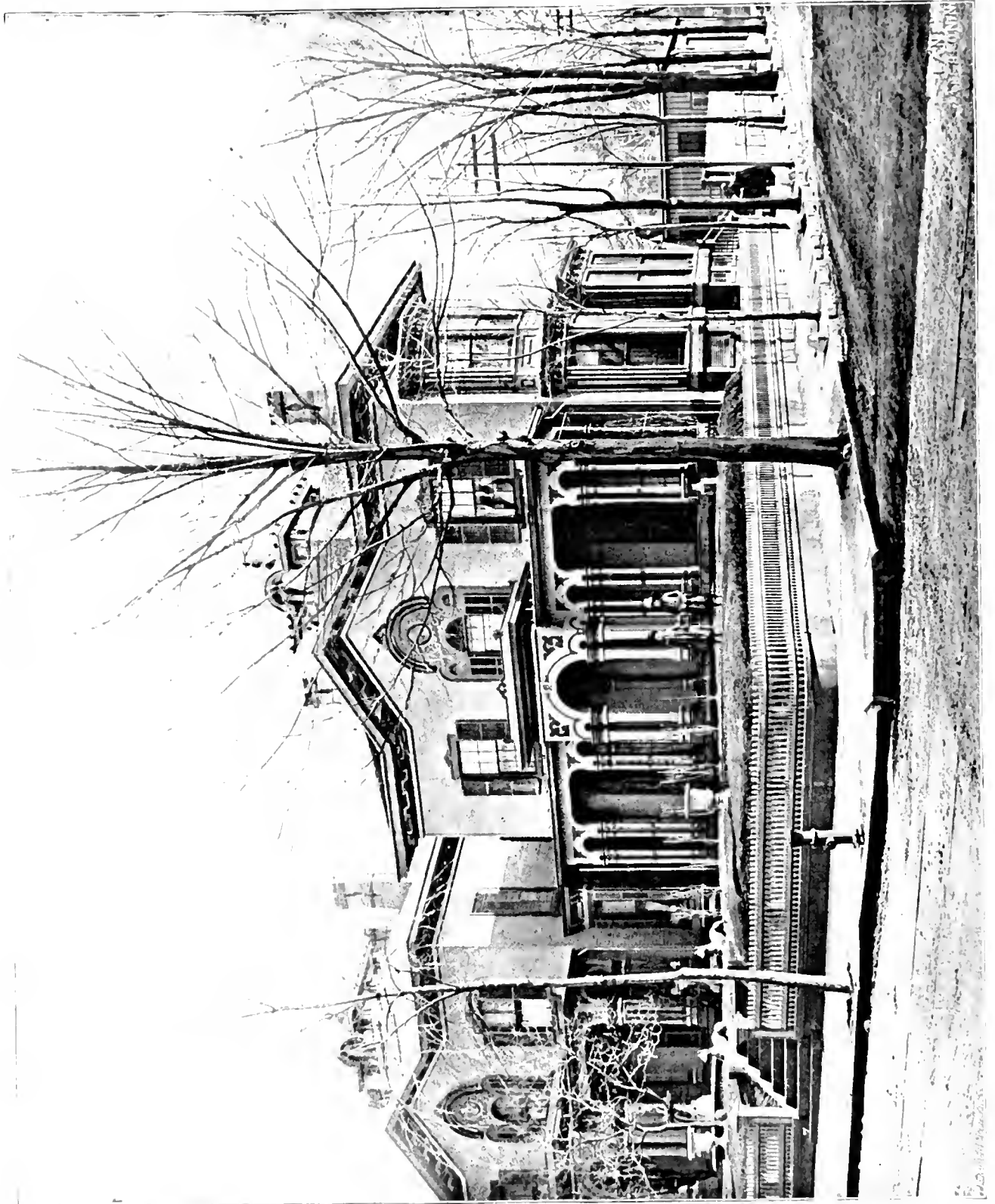
RESIDENCE OF MR CORNELIUS A CADMUS.



VIEW ON LA FOLL STREET SOUTH FROM BROADWAY.



CORNELIUS A. CADMUS.



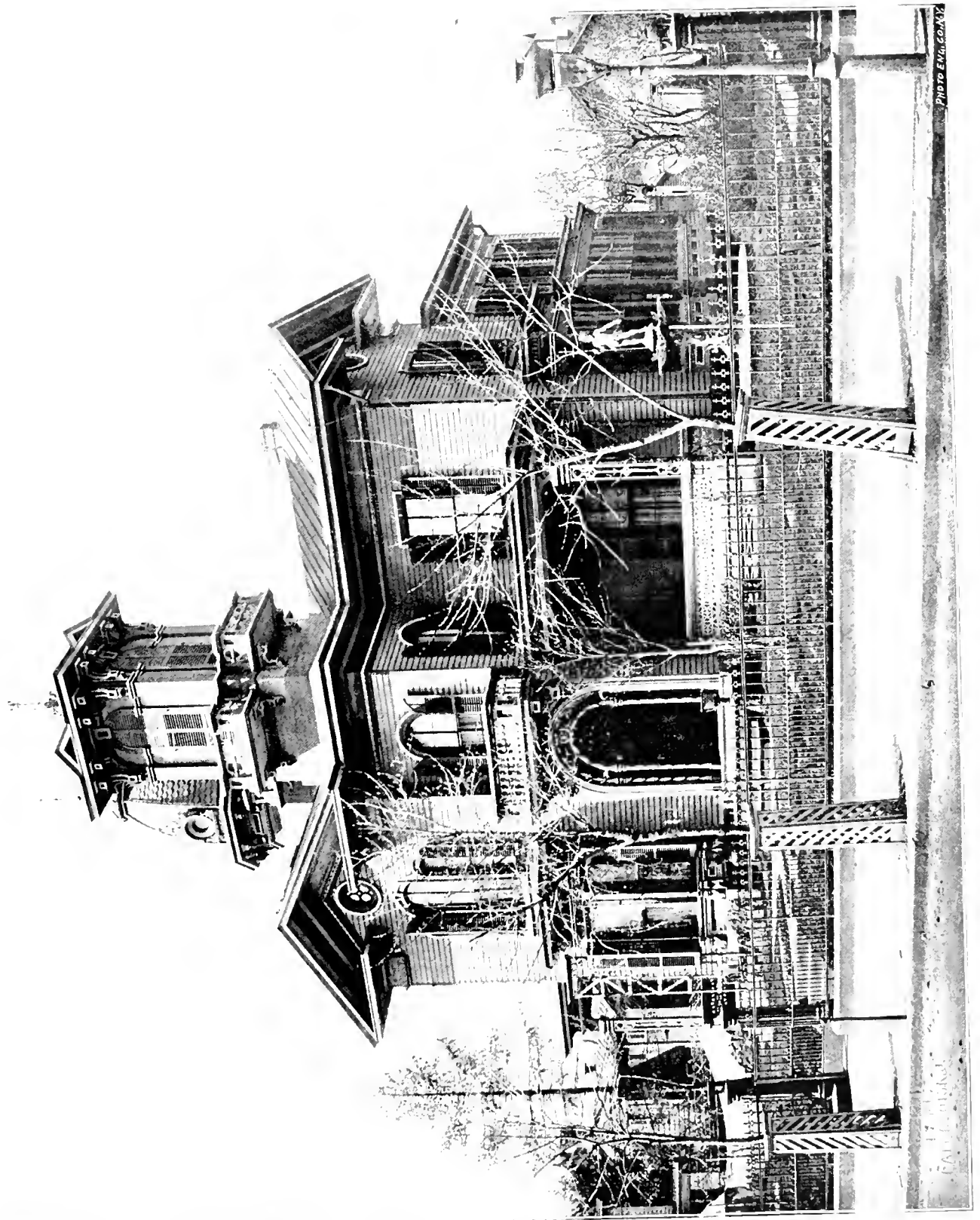
RESIDENCE OF MR. HENRY B. CROSBY.



HENRY B. CROSBY.



RESIDENCE OF MR. JAMES BOOTH.



RESIDENCE OF THE LATE ROBERT HAMILL.

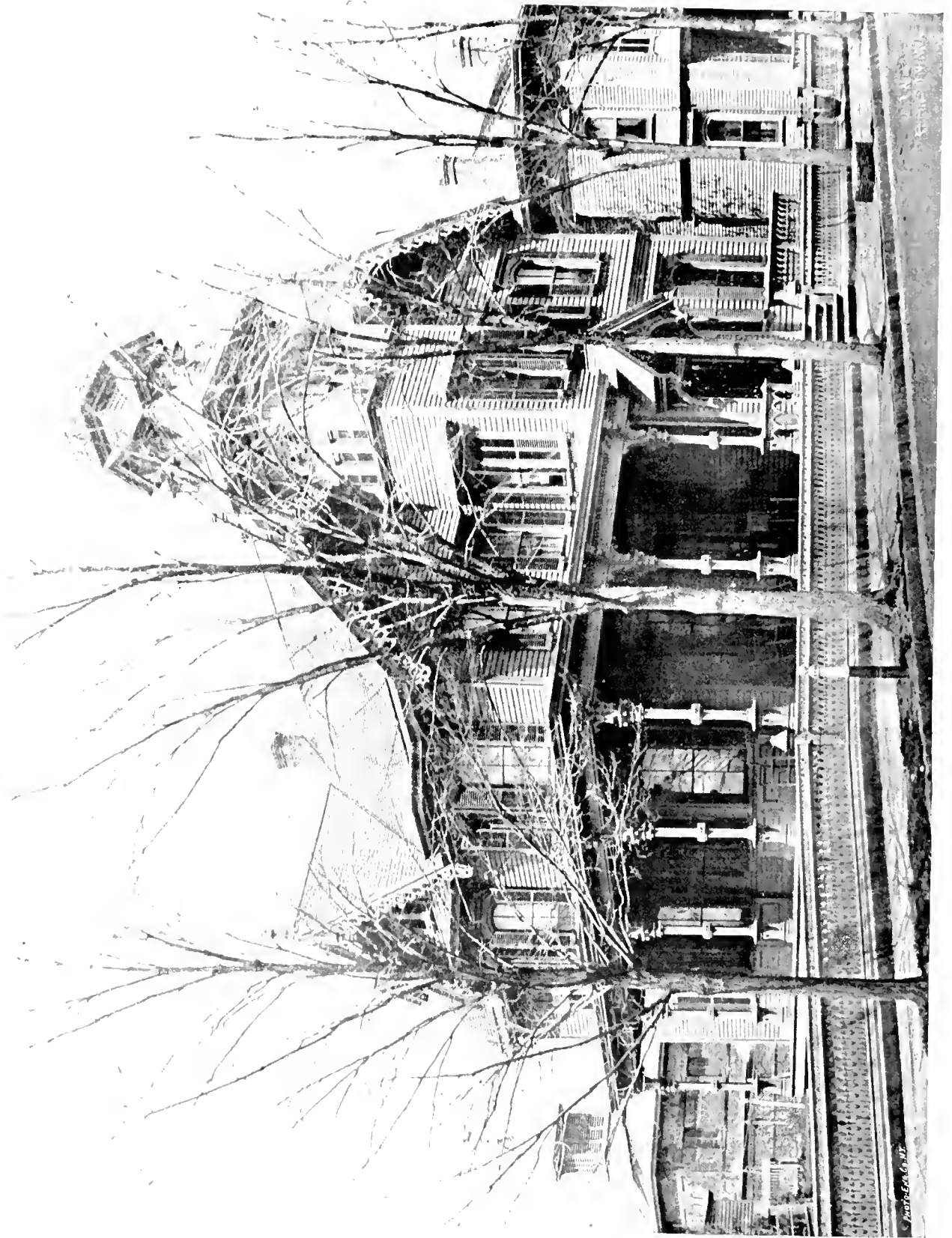
PHOTO ENGL. CO. N.Y.



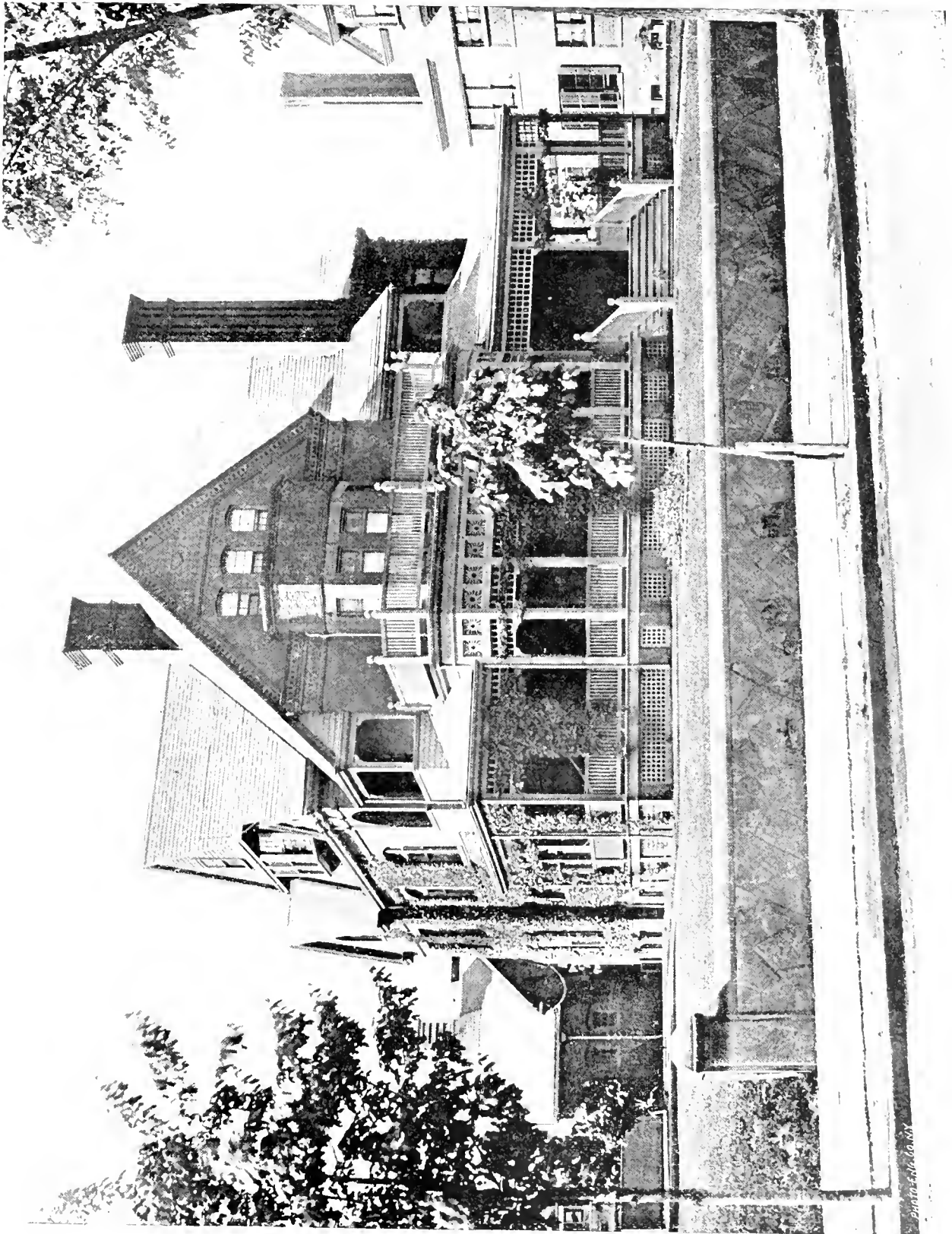
JOHN CHEYNE.



JAMES CROOKS



RESIDENCE OF MR. WATTS COOKE.



RESIDENCE OF MR. W. O. FAYERWEATHER.

Photo. N. O. N.Y.



ANDREW DERROM.



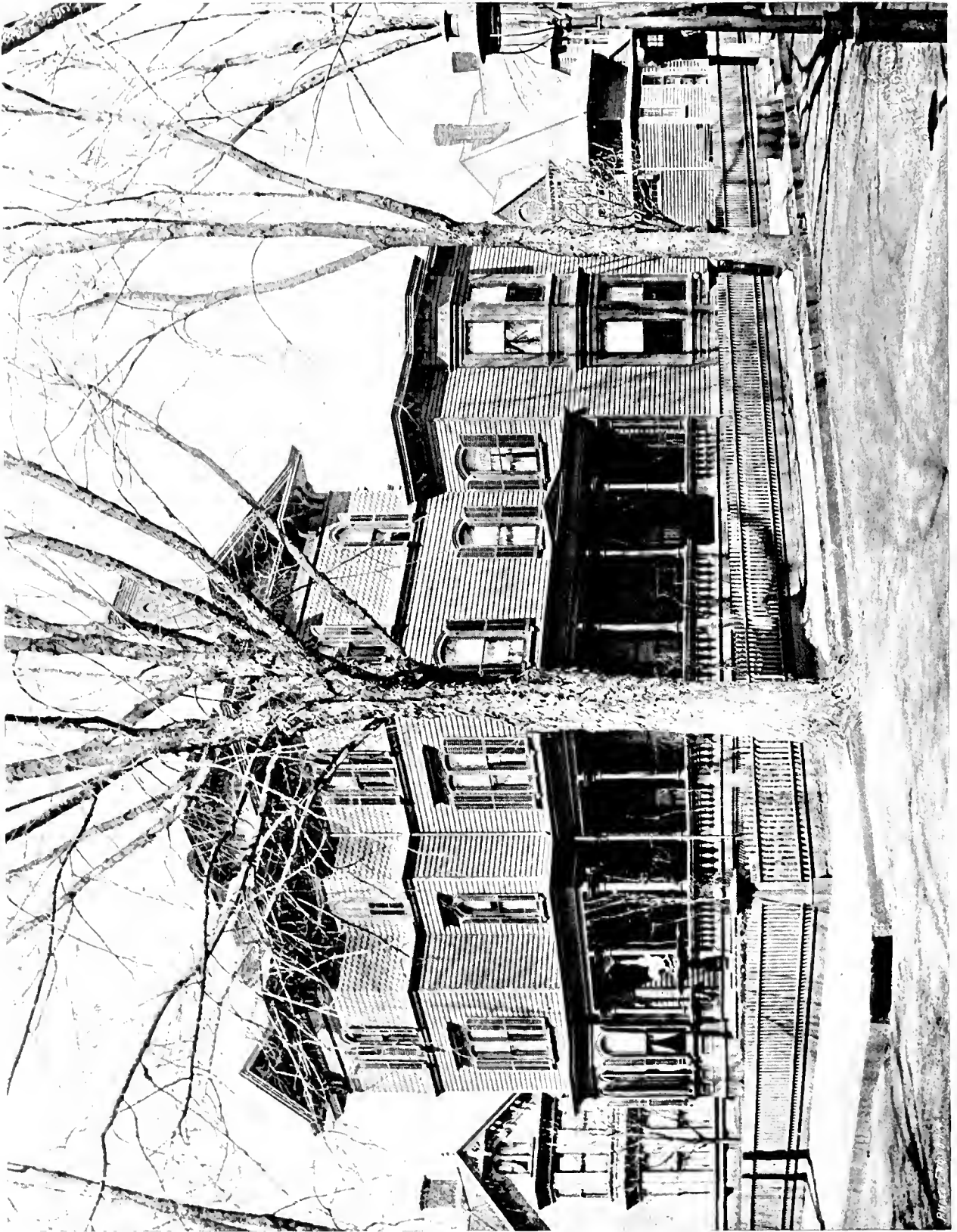
ROBERT M. EKINGS.



GEORGE M. ELLIOT.



SIDNEY FARRAR.



RESIDENCE OF HON. GARRET A. HOBART.



CARRET A. HOBART.



RESIDENCE OF MR. HENRY DOHERTY.



RESIDENCE OF MR. JAMES A. MORRISSE.



GEORGE G. HALSTEAD.



THE LATE THOMAS D. HOXSEY.



T. F. HOXSEY



JOHN T. HILTON.



LESLIE MENDER.



JOHN HOPPER.



ROBERT I. HOPPER.



RESIDENCE OF MR. FREDERICK HARDING.



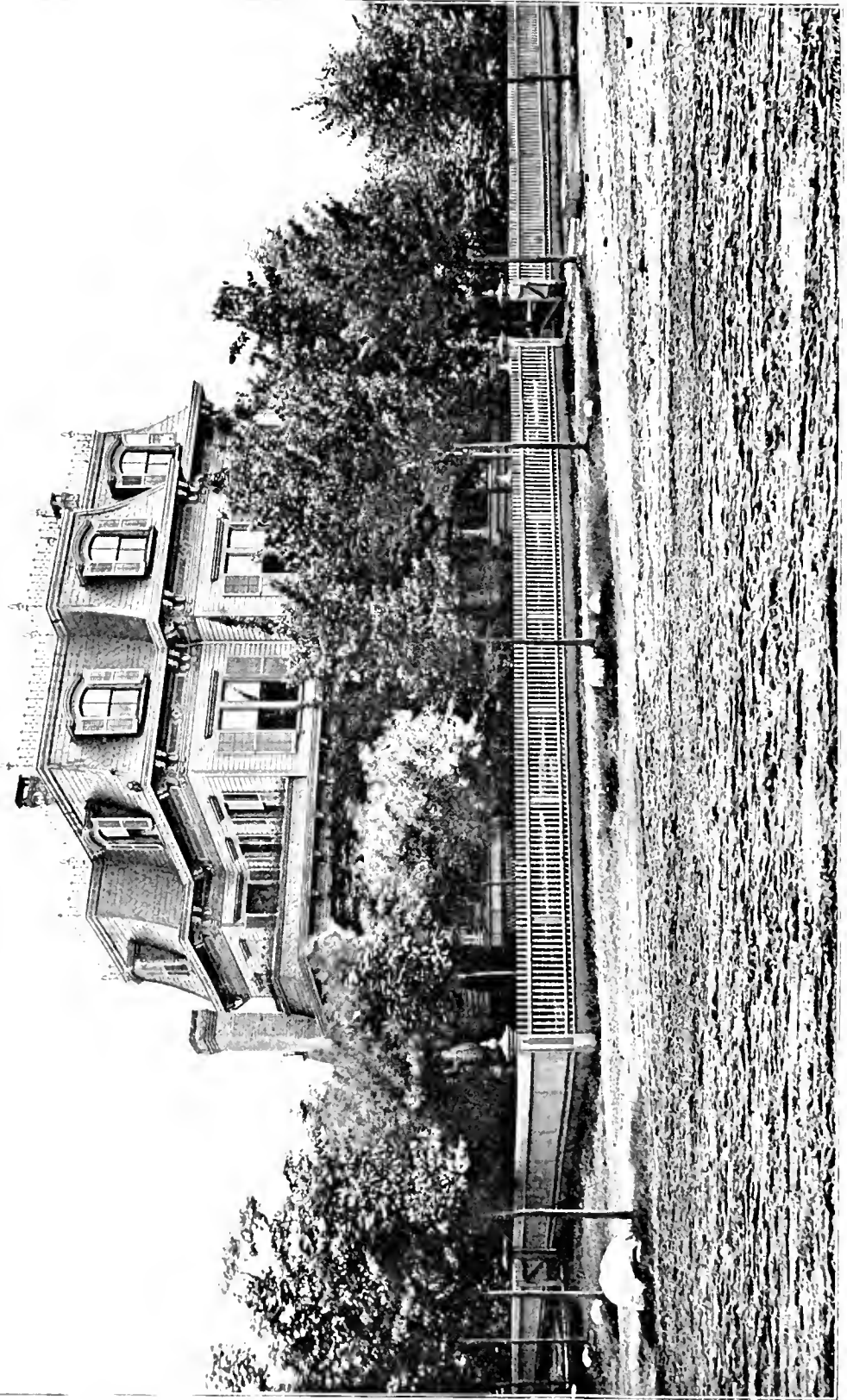
M. HOUMAN.



RESIDENCE OF MR. JAMES INGLIS, JR.



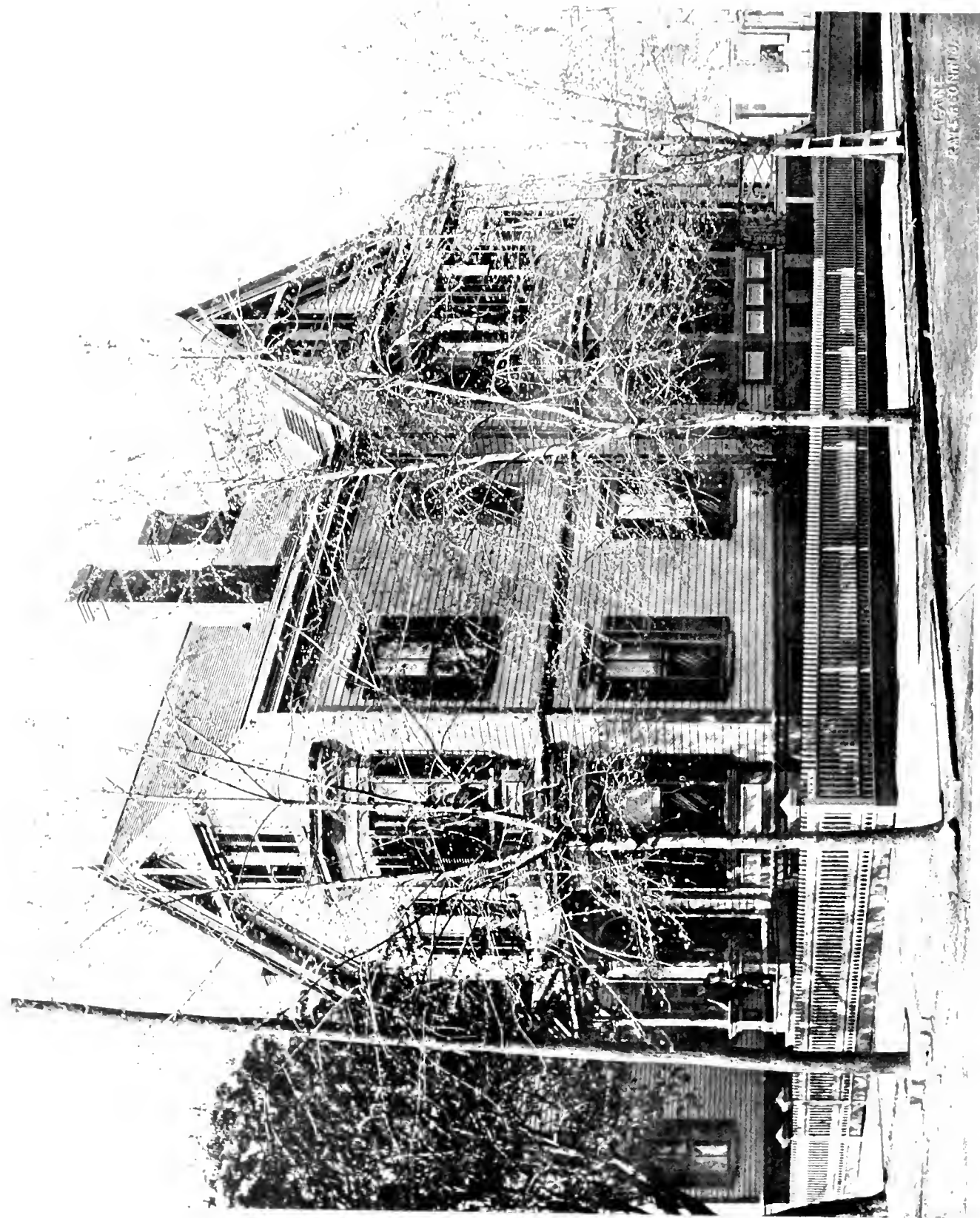
JAMES INGLIS, JR.



RESIDENCE OF MR. ROBERT S. HUGHES.



JAMES JACKSON.



RESIDENCE OF MR. PETER QUACKENBUSH.



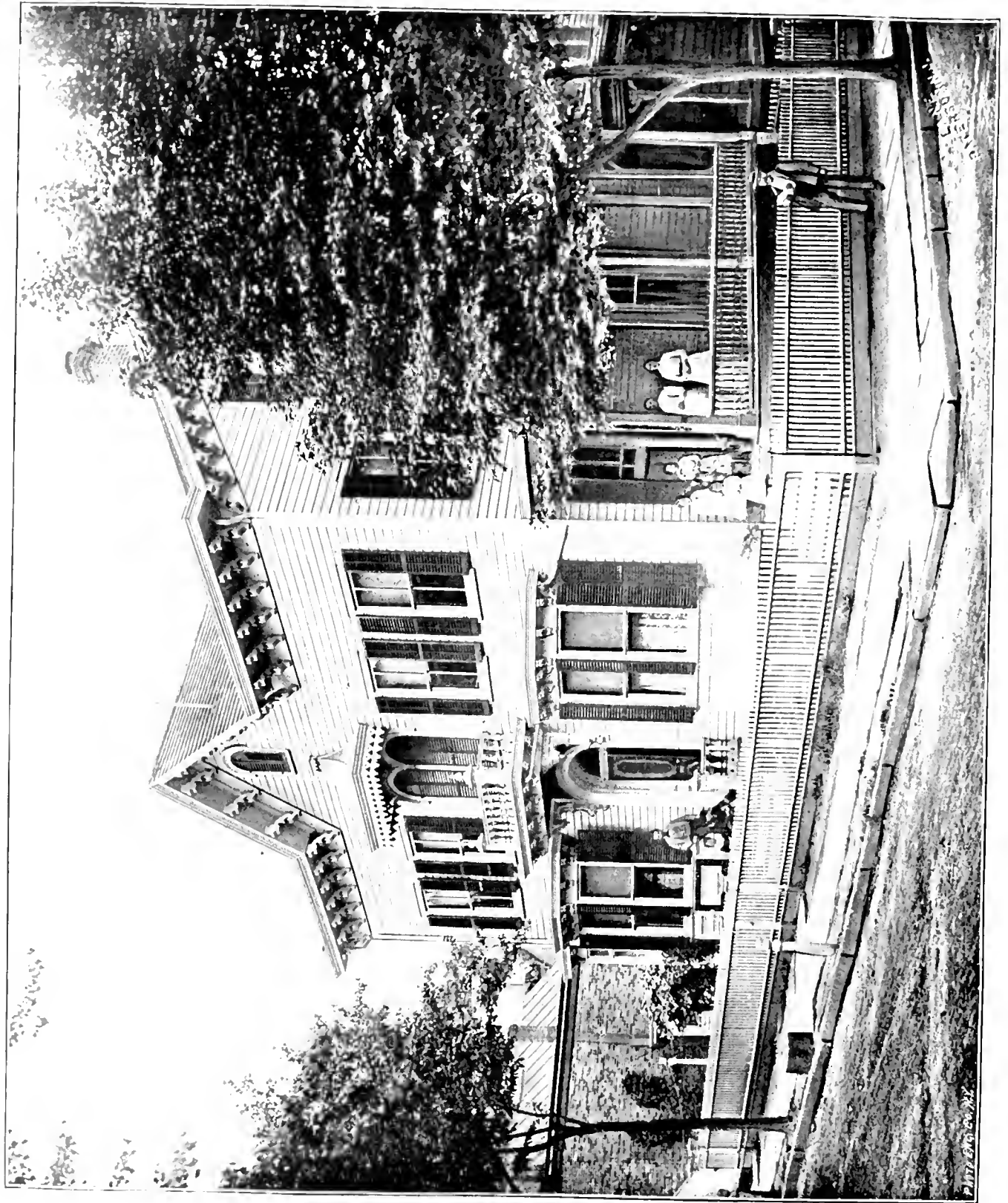
CHARLES M. KING.



RESIDENCE OF MR. JACOB HORANDT.



JOHN F. KERR.



RESIDENCE OF REV. G. W. I. LANDAU.



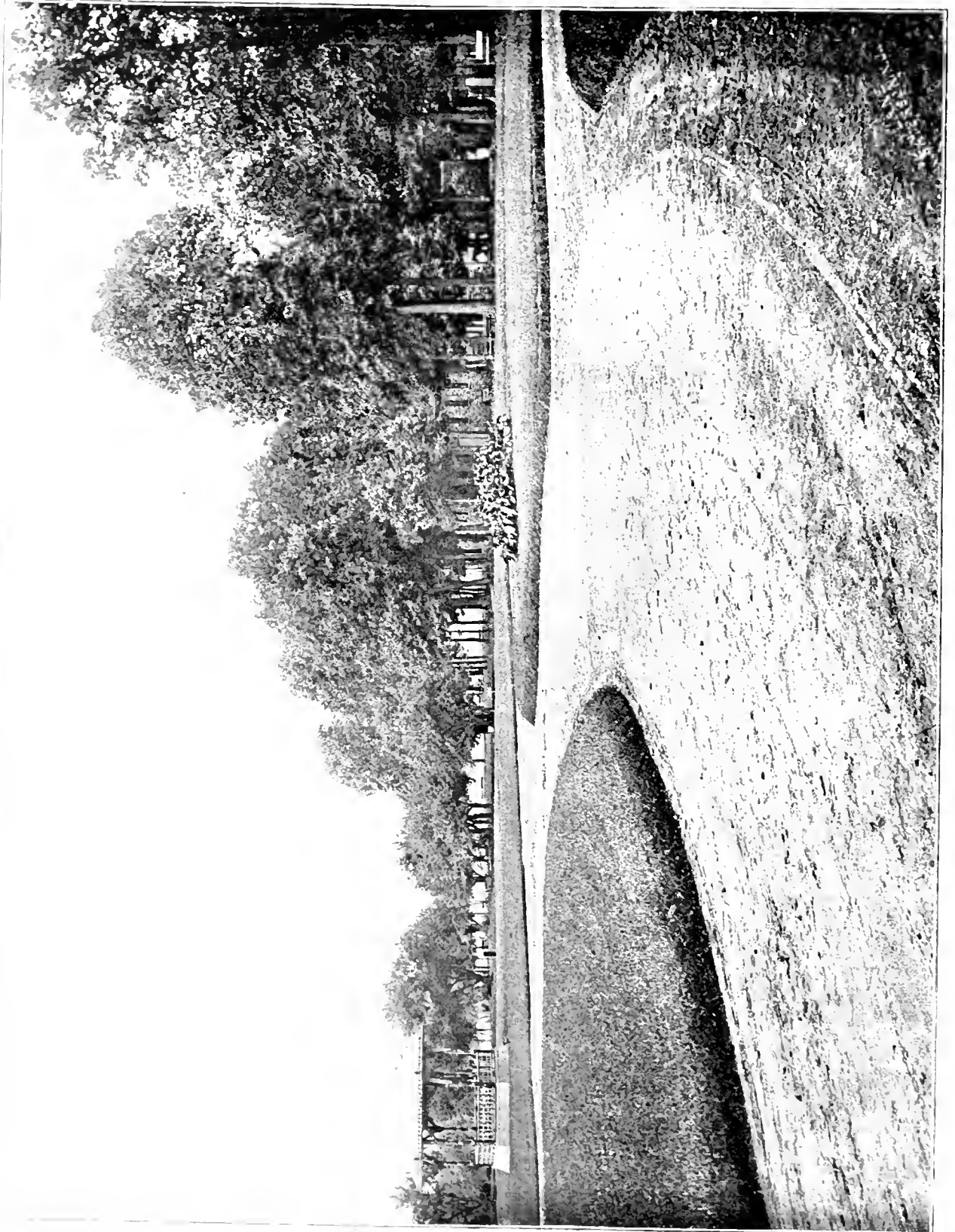
REV. G. W. I. LANDAU.



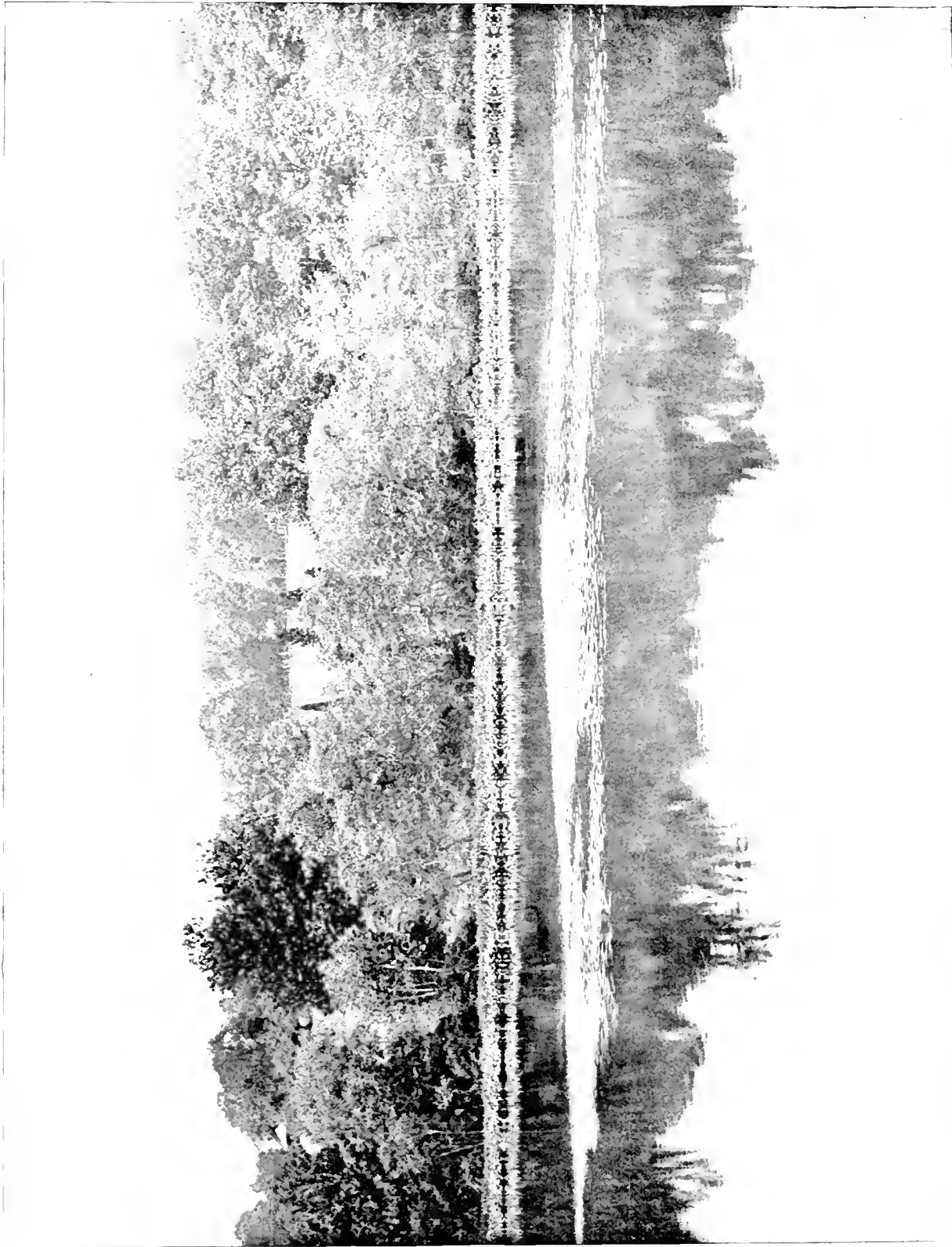
RESIDENCE OF MR. WILLIAM T. RYLE.



GEORGE W. LATIMER.



VIEW IN EASTSIDE PARK.



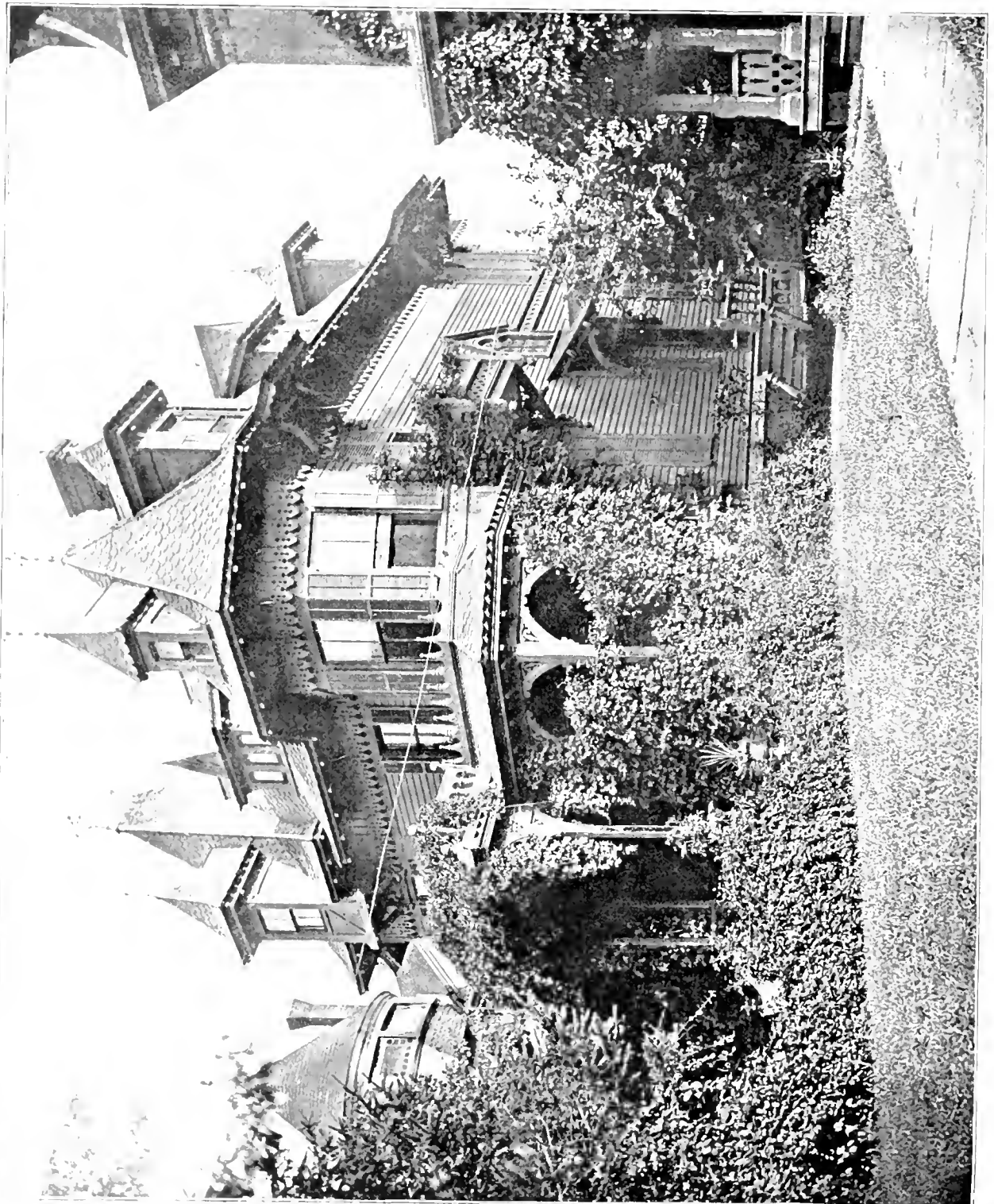
VIEW IN EASTSIDE PARK.



RESIDENCE OF MR. FRANCIS K. MCCULLY.



FRANCIS K. McCULLY.



RESIDENCE OF MR. SAMUEL NATHAN.



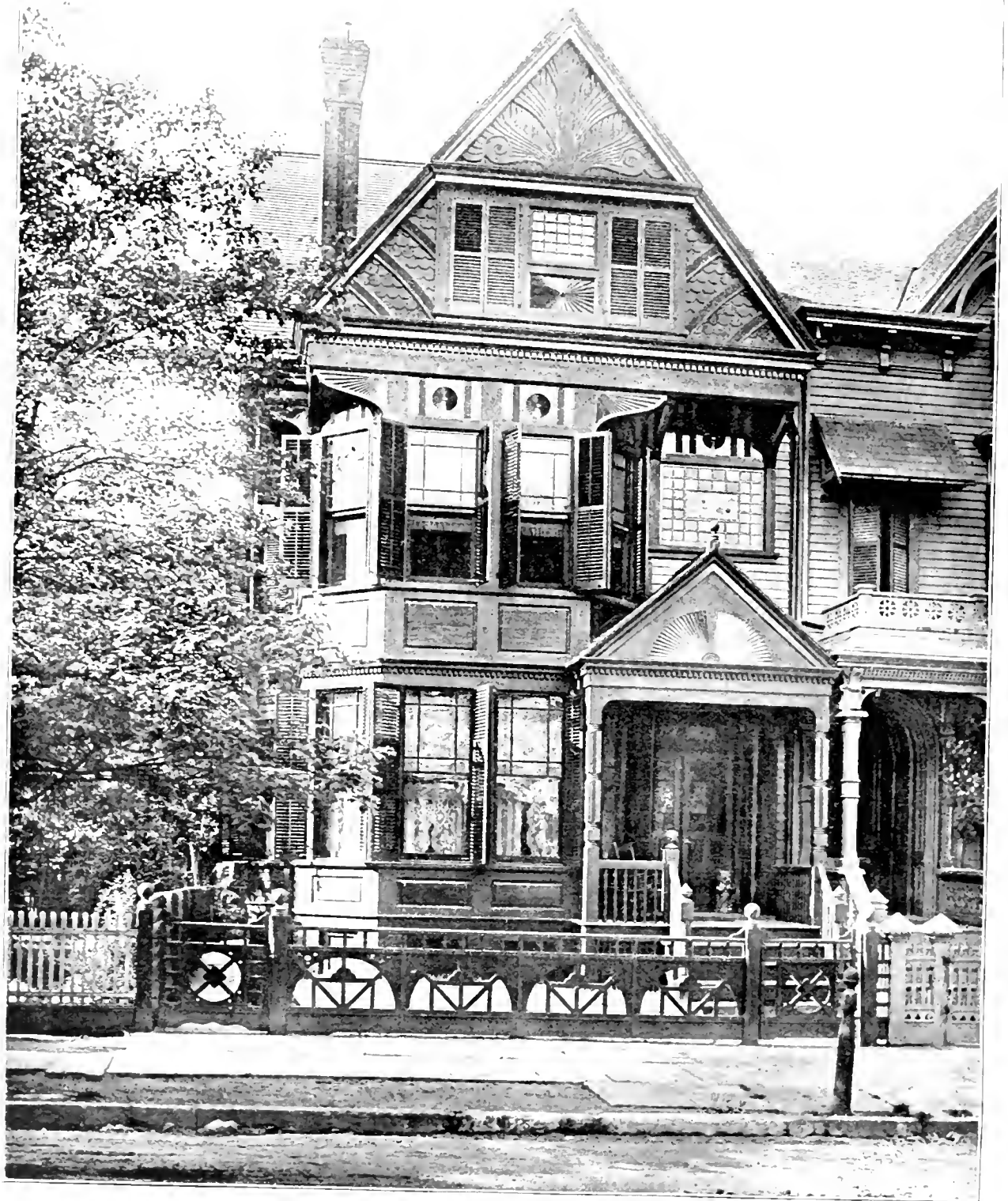
SAMUEL NATHAN.



JAMES W. MCKEE.



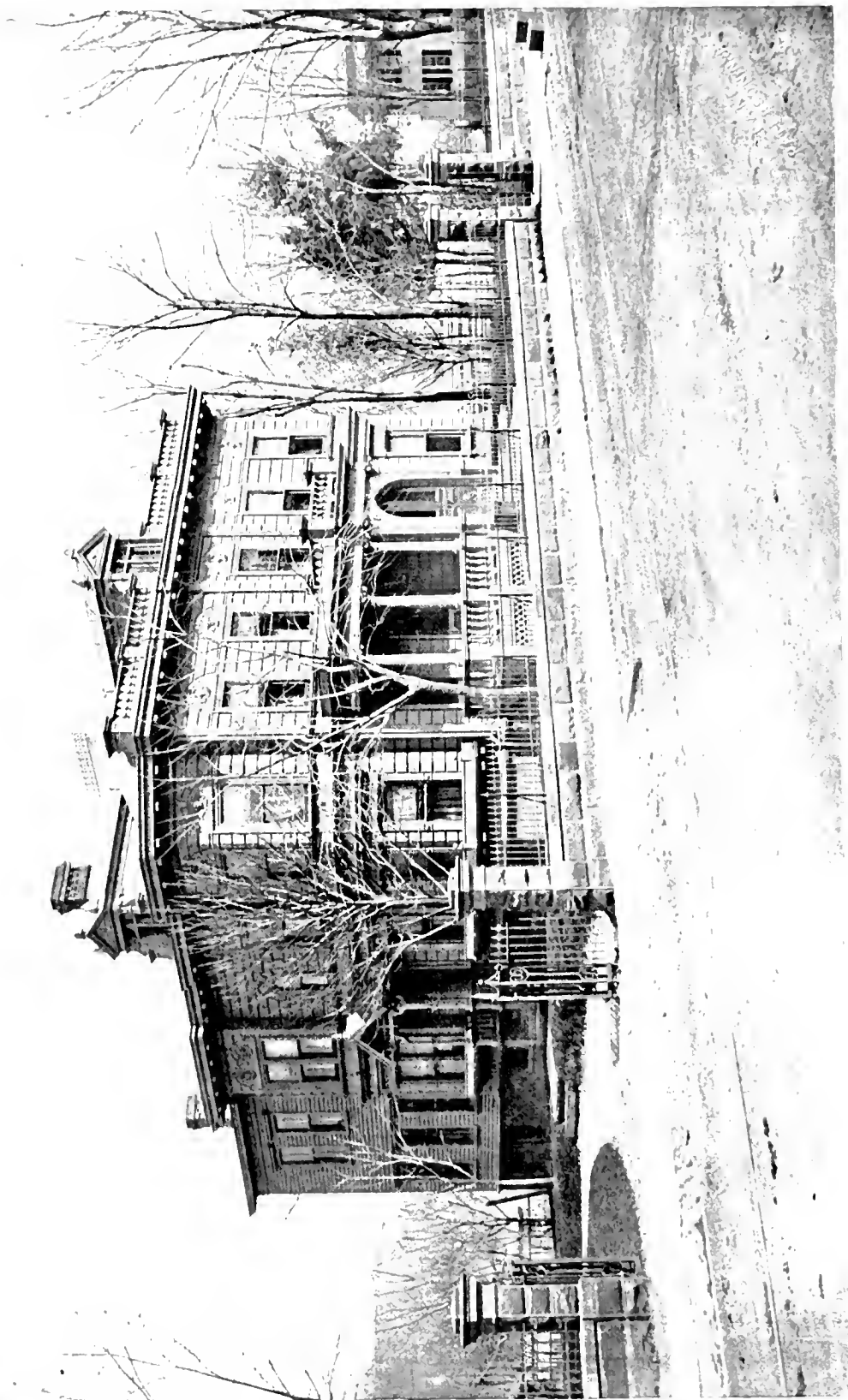
FLORIAN OBORSKI.



RESIDENCE OF MR WILLIAM NELSON.



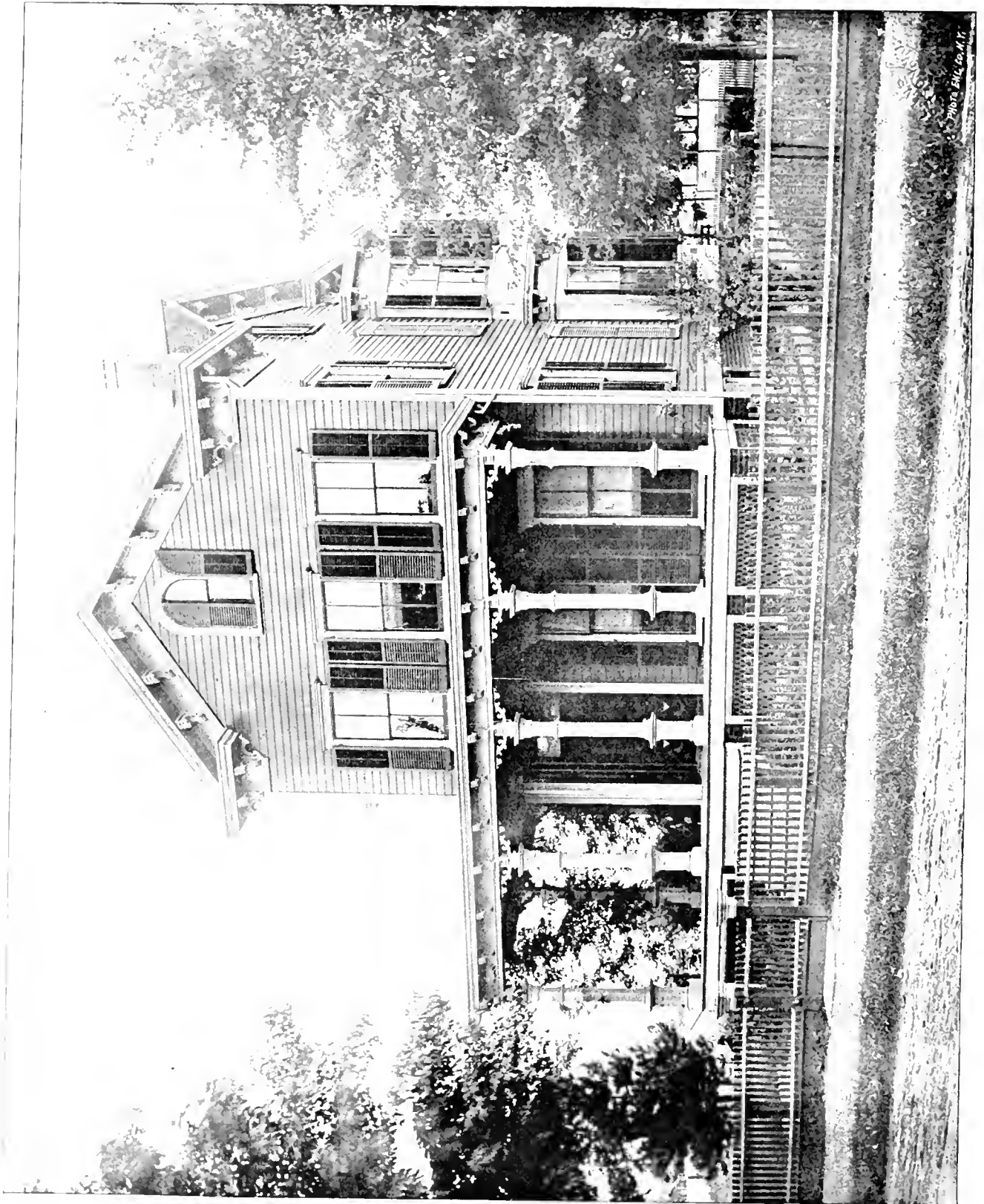
WILLIAM NELSON.



RESIDENCE OF THE LATE CHARLES R. PELGRAM.



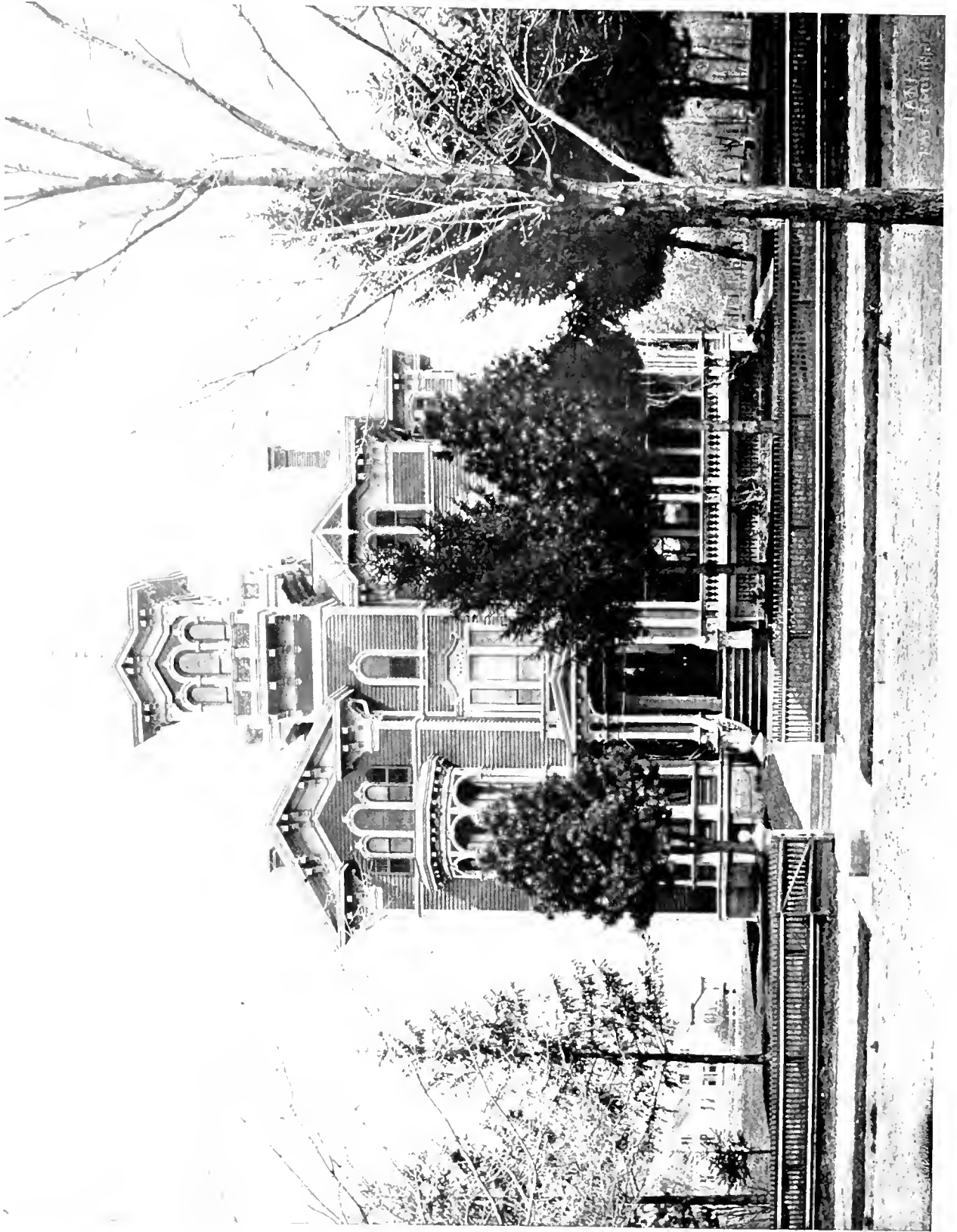
THE LATE CHARLES R. PELGRAM.



RESIDENCE OF MR. JOHN RAMSAY.



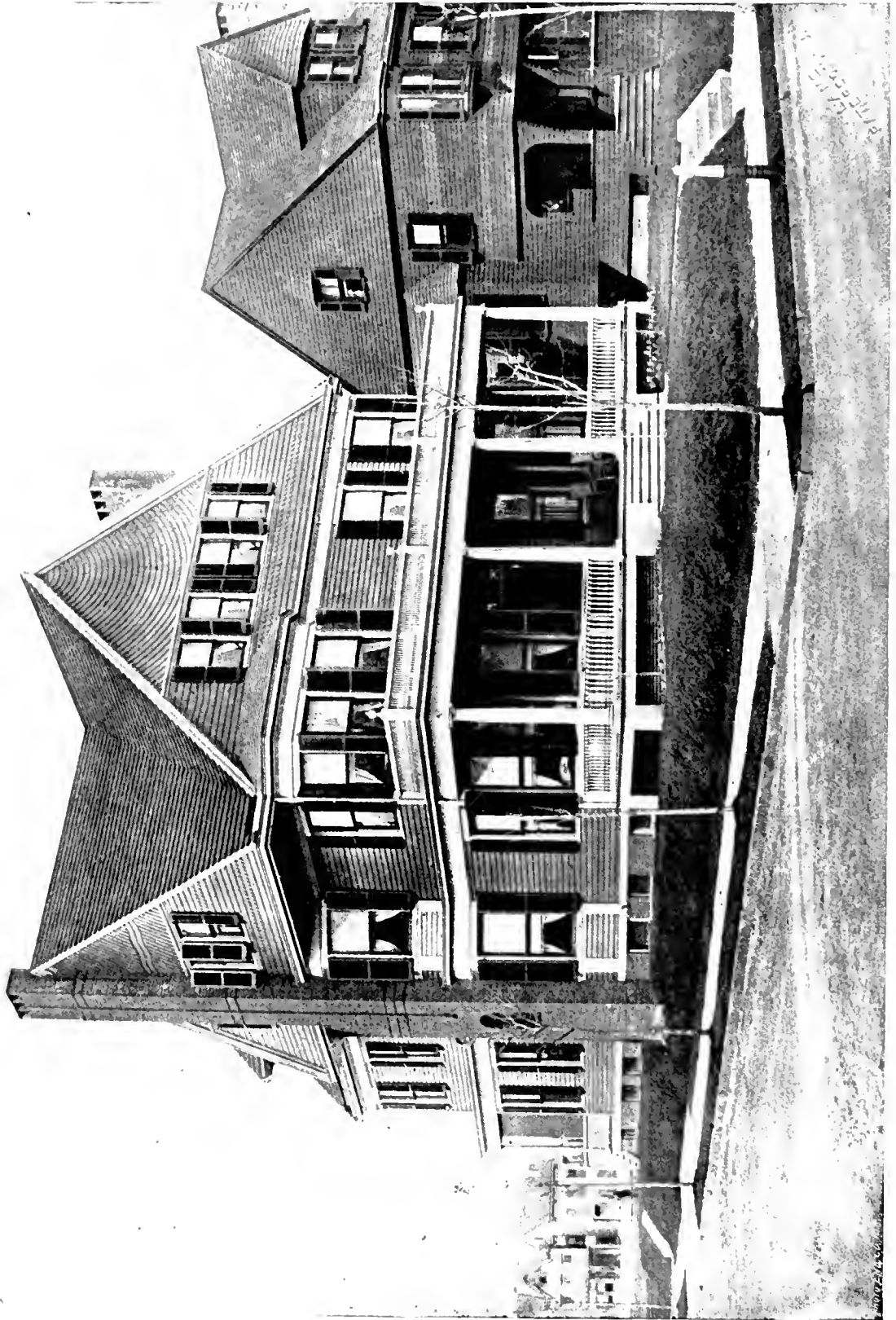
ARTHUR B. PEARCE.



RESIDENCE OF MR. JOSEPH SHARPE.



T. W. RANDALL.



RESIDENCE OF MR. JOHN REYNOLDS.



JOHN REYNOLDS.



P. H. SHIELDS.



T. C. SIMONTON.



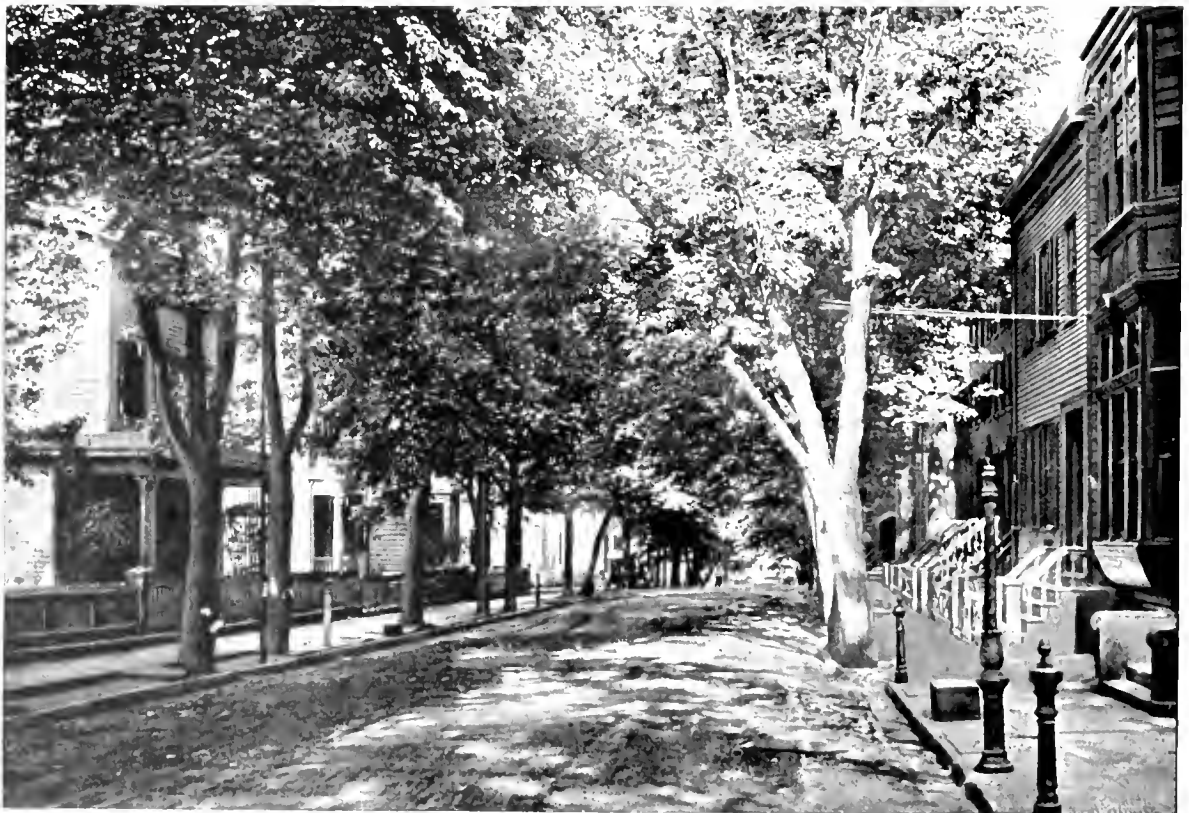
FRANCIS SCOTT.



S. S. SHERWOOD.



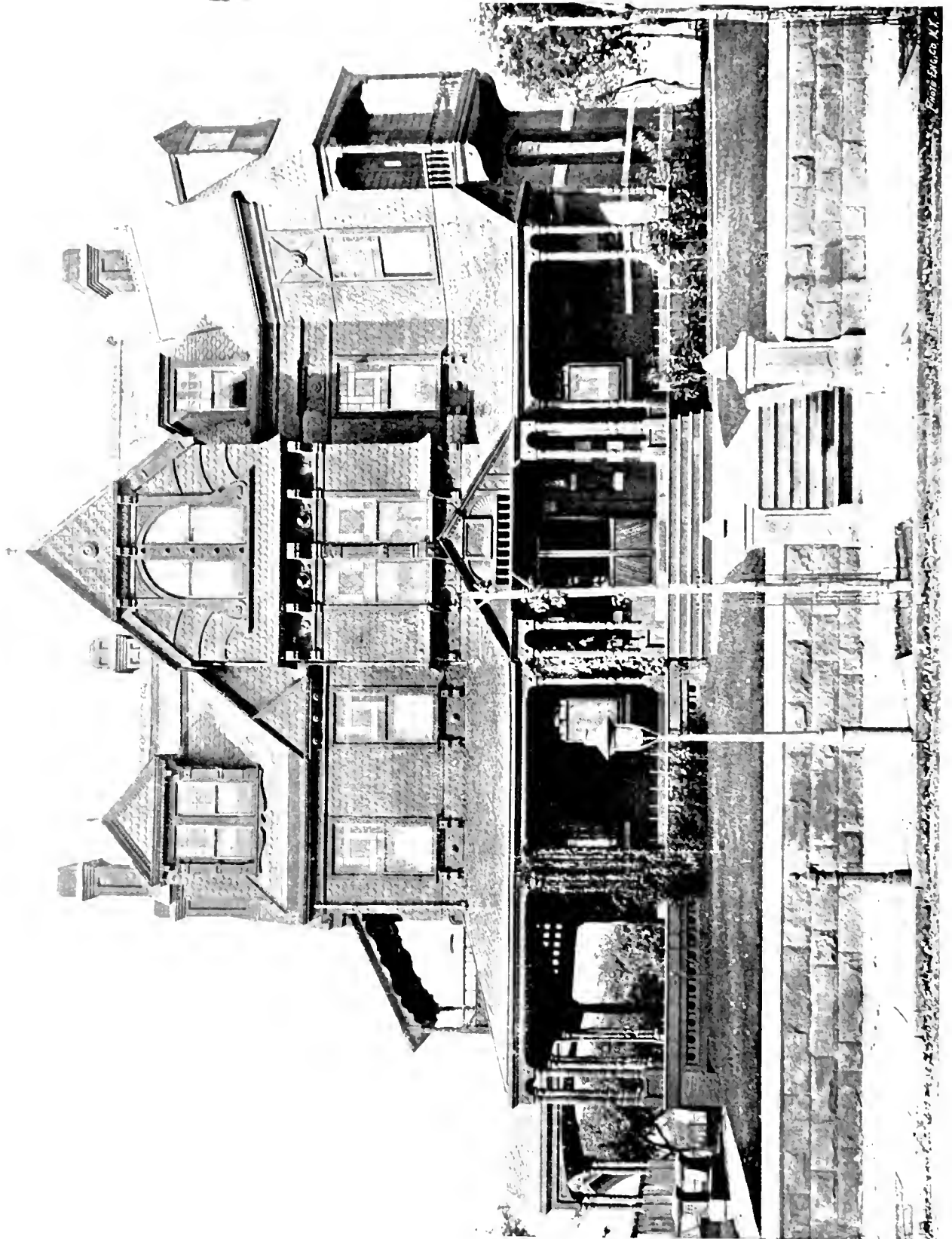
RESIDENCE OF MR. WILLIAM M. SMITH.



VIEW ON ELLISON STREET EAST OF COLT STREET.



WILLIAM M. SMITH.



RESIDENCE OF MR. WILLIAM STRANGE.



C. C. SHELBY



RESIDENCE OF MR. JOSEPH TOWELL.



JOSEPH TOWELL.



THE LATE SOCRATES TUTTLE.



THE LATE HENRY A. WILLIAMS.



FRANK VAN CLEVE.



ALFRED A. VAN HOVENBERGH.



P. D. WESTERVELT.



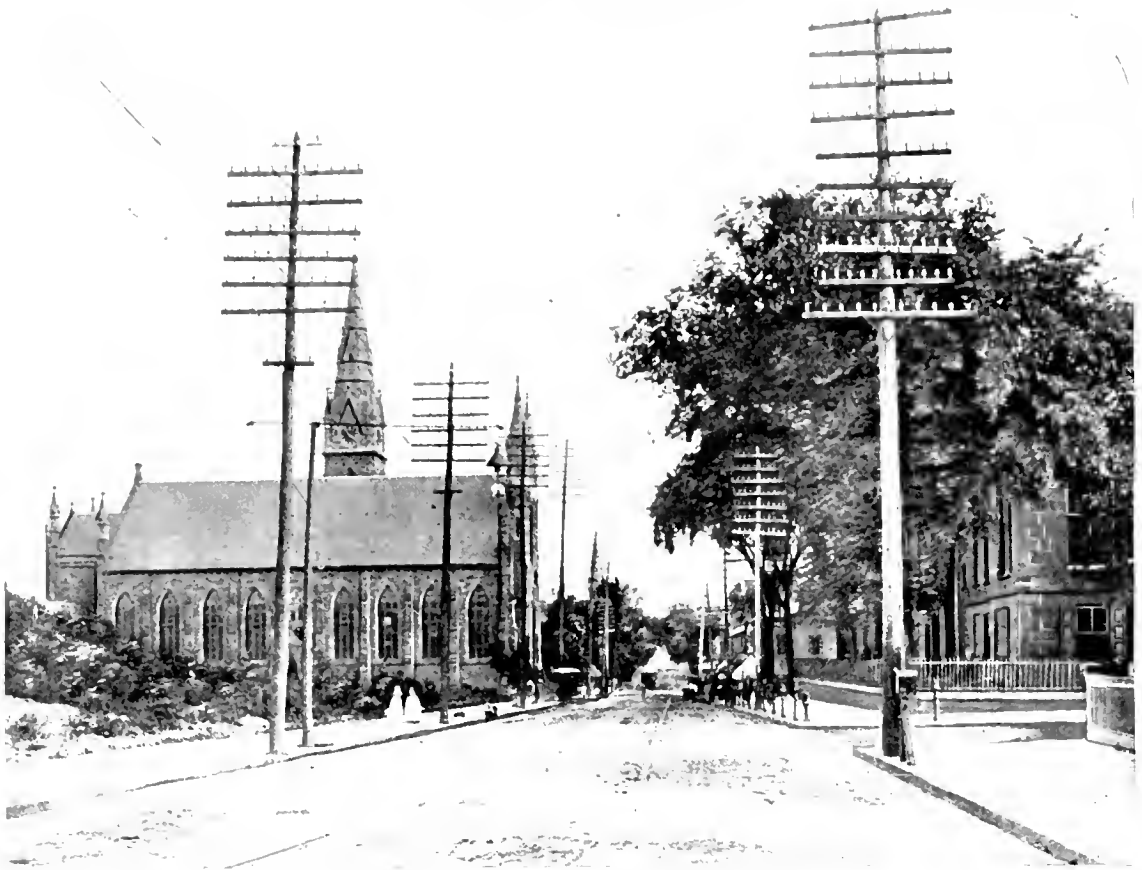
JAMES WILSON



RESIDENCE OF MR. JACOB WALDER



JOHN J. WARREN.



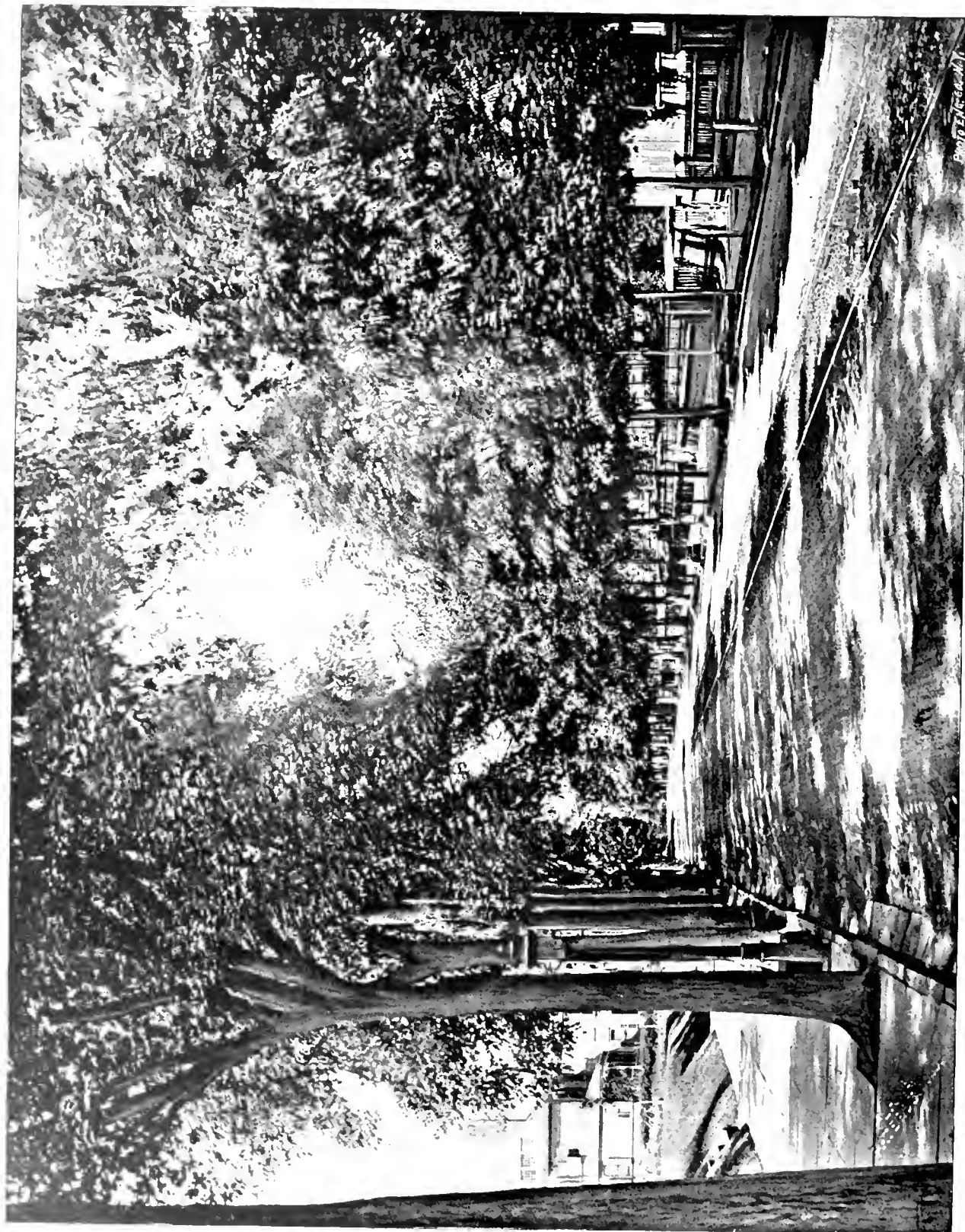
VIEW ON MAIN STREET, NEAR COURT HOUSE



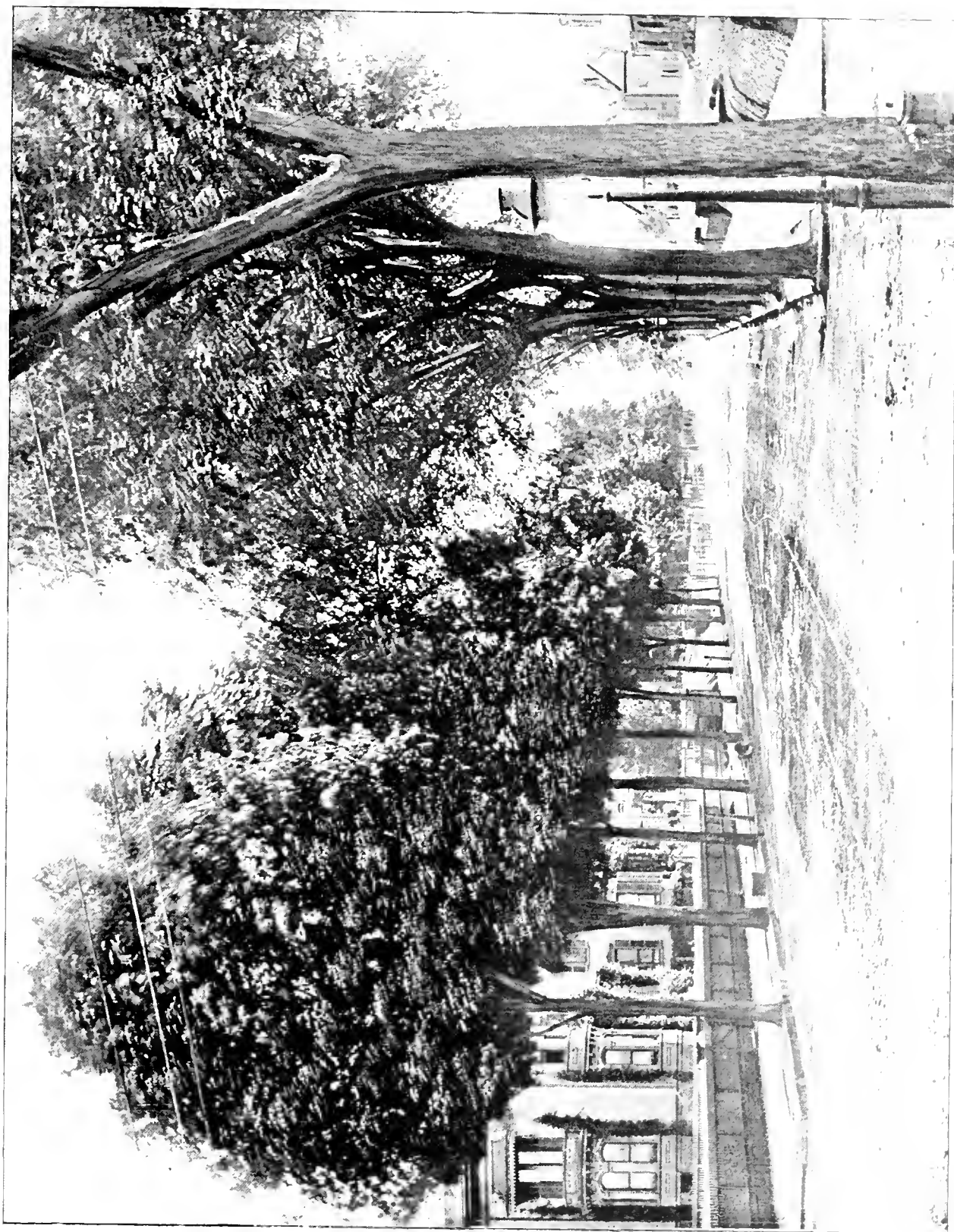
A BUSINESS BLOCK ON MARKET STREET.



GEORGE WURTS.



BROADWAY, WEST FROM GRAHAM AVENUE




BROADWAY EAST FROM GRAHAM AVENUE.



A BIT OF SCENERY NEAR HIGH BRIDGE.

Biographical.

 EDWARD T. BELL was born in Stanhope, N. J., on March 26, 1843. His family subsequently removed to Branchville, Sussex county, where he enjoyed the advantages of a district school. In 1860 he graduated at the Collegiate Institute in Newton, N. J. Early in his life he showed an inclination for the business of banking and at the age of seventeen he entered the employ of the bank at Hackettstown, N. J. With characteristic energy he devoted himself to the study of the theory as well as the practice of banking, and was rewarded by rapid advancement. In the spring of 1861 he accepted the appointment of teller in the then Bank of Jersey City, now the Second National Bank of Jersey City. In the same year he was elected cashier of the First National Bank of Paterson, which was at that time reorganizing. His practical knowledge of the details of the business made his selection a very fortunate one for the bank. In 1874 he severed his connection with the bank in order to engage in mercantile pursuits in New York city. He continued as one of the directors of the bank, and in 1882 was elected vice president. In 1883 he again entered the active service of the bank, resuming the desk and duties he had voluntarily relinquished several years before. During his mercantile career in New York he visited Europe on several occasions on important business connected with the firm of which he was a member. He was chairman of the New Jersey state commission to the Paris Exposition of 1878, and had charge of the arrangements for the banquet tendered to General Grant. His relations with the Commissioner General of the United States were cordial and confidential, he being frequently entrusted with duties connected with the administration of the American section. Mr. Bell is well known as a man of public spirit, always ready and willing to assist in any movement tending to the advancement of Paterson. His services in connection with the erection of the Church of the Redeemer were very valuable; as one of the Commissioners of Parks he has labored diligently and faithfully. He devotes considerable time to public affairs, in which he is warmly interested, and while always declining public office he is ever willing to aid by his advice and efforts every good cause which may prove of benefit to the people.

DEWEIT C. BOLTON was born June 16th, 1848, at Rahway, N. J. At four years of age he removed with his father to the City of Paterson, where he has continued to reside. At an early age he became an employee in a cotton factory. His father was superintendent and had very extensive experience in the manufacture of cotton fabrics. But young Bolton, not satisfied with the limitations surrounding his position, resolved to enter upon a task at once more congenial to his taste and hopeful for the future. He began to study law. With the superb advantages that most students enjoy, the study of the law is the natural sequence following life at college and preceding life in the world. But with Mr. Bolton, it was different, indeed. His life was not flushed with such roseate tints. He studied law at night for two years and worked in the factory during the day. Finally to the regret of all with whom he daily worked, he gave up his employment to complete his studies in the office of his preceptor, preparatory to his application for admission to the bar. At the June term of the Supreme Court, 1881, he received his license to practice as an attorney-at-law, and three years later at the June term of the same court he was admitted to practice as a counsellor-at-law. Mr. Bolton is a Republican, and a very prominent member of his party in the county of Passaic. He served for many years upon the Executive Committee of the county. He was elected an Assemblyman in 1884, and again in 1885. His voice and vote were always with the right. He ranged himself with the people and the promises that he made before election he faithfully kept. He is remembered gratefully by all his old associates in the Assembly, for having injected into many a cold debate the warming influence of his wit.

JOHN J. BROWN was born in New York city in 1817. When he was five years of age his parents removed from New York and settled in Paterson, where his father engaged in the grocery business. John J. attended school until he was thirteen years of age, when he became a clerk in a dry goods store. He went to New York in 1834 and effected an engagement as clerk with James La Tourette, at that time a noted manufacturer of furs and cloth caps.

in whose employ he continued for three years. In this employment he passed the winter of 1836-7 in New Orleans. When he returned to New York in May, 1837, he found that his employer had failed, having gone down in the great financial storm of that year, which carried with it the United States banks, together with many of the large and small establishments of the day. This failure prevented him from entering into business for himself, as he otherwise would have done, and he accordingly returned to Paterson. He then again found employment as a clerk in a dry goods store and a few years later succeeded to his father's grocery business. He continued the latter until 1844, when he changed his vocation and embarked in the dry goods business. This venture proved a very successful one and he continued in it until 1867. At the close of his mercantile career he had a large establishment on Main street, and had built up the most extensive business of the kind in the city. He then devoted his talents to larger projects and became one of the most prominent men of the city. His connection with the First National Bank, with the Savings Institution, with the Cedar Lawn Cemetery Company, with the Paterson and Passaic Horse Railroad Company, and the large share of work which he has done towards making Paterson one of the most flourishing cities in the country are told on other pages. No important step has ever been taken in the improvement of the city without his valuable advice and assistance. When Paterson was organized Mr. Brown was chosen one of the members of the Board of Aldermen, and he was re-elected to that position while absent in Europe. In 1851 he was elected the first Mayor of the city, but at the expiration of his term he persistently declined a re-election. During his Mayoralty he projected and carried out the measure for paving the sidewalks, which before this time had been almost entirely neglected. It was also during his connection with the city government that the first sewer was constructed. In 1850 he was induced to accept the Republican nomination for the Legislature and was elected. He served in the Assembly for one year and this closed his official career, as since that time he has invariably declined all offices which have been tendered to him. A recent writer says very properly of Mr. Brown: "He is a gentleman of very active, energetic temperament, systematic and practical in everything that he does, courteous and polite in demeanor to all and as a business man and bank director has no superior. His earnest spirit and good sense in executive management make him invaluable as a co-worker in all enterprises. He avoids ostentation in every particular, and is as discreet and practical in all his tastes as he is reliable in his character. Socially he is noted for his genial traits, kindness of heart and steadfastness in the discharge of all moral and religious duties."

..

JOHN T. BUCKLEY was born in Paterson on February, 2, 1842, the second son of ex-Mayor Benjamin Buckley.

He was educated in the public and private schools of the city, and subsequently was employed in the Cooke locomotive works. At the breaking out of the war of the rebellion he enlisted as private of Co. I, 2d Regiment, N. J. Volunteers; after serving over a year he was transferred to Co. A, of the 11th Regiment of N. J. Volunteers, of which company he was successively made Second Lieutenant, first Lieutenant and Captain, holding the latter position for three years when he was honorably discharged. He was wounded at the battle of Gaines' Mill. Returning to Paterson at the close of the war he took an active interest in politics and in 1870 was elected a member of the Board of Chosen Freeholders from the Fifth Ward; the ward was strongly Democratic but Mr. Buckley's popularity not only overcame this but also gave him a handsome majority; in 1872 he was again a candidate and was re-elected by an increased majority. At the expiration of his second term in 1874 he was by an almost unanimous vote of the following Board chosen Warden of the County Jail, and he has held that office ever since, his popularity preventing others from aspiring to that position. Mr. Buckley has always been a Republican and an active worker for the party's interests; for ten years he has been a member of the Republican County Committee and for four years chairman of that organization.

..

CORNELIUS A. CADMUS was born in Bergen county, N. J., on October 7, 1844, and after a common school education entered into mercantile business in New York city where for a number of years he was a prominent produce merchant. He took up his residence in Paterson when young, and has always been identified with the progress of the city. Unostentatious and of a pleasant disposition he made hosts of friends. He had always been a Democrat but kept aloof from public life. In 1883 he was induced to accept the Democratic nomination for assembly in the third district of Passaic county, a district which had always given a large Republican majority. Such was his popularity that he easily overcame the Republican majority and defeated a popular antagonist. After serving one term in the assembly he declined a renomination which was unanimously tendered him. In 1887 he was again induced to enter the political field and accepted the Democratic nomination for sheriff of Passaic county. The county had elected a Republican sheriff three years before by considerably over two thousand majority and had since that time given large majorities against the Democrats. On the part of any other person the acceptance of the nomination would have been foolhardy, especially as the Republicans were almost unanimous in the selection of their candidate. But Mr. Cadmus not only overcame the Republican majority but was elected by a majority of 1885. He is at present serving the last year of his term and there is no doubt that he will leave the office a more popular man even than he was when he entered it.

JOHN CHEYNE was born in Cooper, County Fife, Scotland, on February 12, 1811, and at eleven years of age went to work in a flax mill. At fourteen years of age he was employed as hackle machine boy in the mills of Cox Brothers, at Lochee, Dundee. In this establishment, which employed six thousand hands, Mr. Cheyne learned thoroughly the manipulation of the flax fibre; he devoted himself diligently to a thorough knowledge of flax manufacture, working himself up from the humble position he had when he entered the employ of Cox Brothers to the position of assistant manager of the whole works. In the fall of 1872, Nevins & Co., of Boston, Mass., were in want of a skilled superintendent for their extensive works at Bethuen, Mass., and they offered this position to Mr. Cheyne, having become satisfied that he of all others was the proper man for the place. Mr. Cheyne was accordingly induced to come to this country and for seven years he managed the mills at Bethuen. He then formed the acquaintance of Mr. John Sloan, the president of the Dolphin Manufacturing Company of Paterson, and was induced to accept the position as general superintendent of these works. For eleven years he remained in this position, having only recently severed his connection with the Dolphin company. During the time that he was superintendent the mills were repeatedly enlarged under his personal supervision. Mr. Cheyne is well known for his pleasant disposition, energy and liberality. While superintendent of the Dolphin mills he inaugurated a system by which the hands contributed weekly from their pay towards the maintenance of the two hospitals in Paterson, an honored custom which was subsequently adopted in a large number of the other industrial establishments in the city.

HENRY B. CROSBY, whose portrait and a picture of whose residence are given on other pages, was born in Brattleboro, Vermont, in 1815. He came to Paterson in 1837 and began a mercantile life. For nearly half a century he was engaged in the grocery business, both wholesale and retail, and was always regarded as one of the foremost business men of the city. In matters pertaining to the progress of the city Mr. Crosby held a similar position, being actively identified with nearly every movement that had for its object the advancement of the city of Paterson. He has been for a number of years president of the Cedar Lawn Cemetery Company, a director of the First National Bank and a prominent and ever active member of the Board of Trade. In politics Mr. Crosby has always been a Republican, and he was a delegate to the convention which nominated Abraham Lincoln for President. His own inclinations favored Mr. Seward, but when it became apparent that the party favored Mr. Lincoln Mr. Crosby cast his vote for him. A number of years ago Mr. Crosby retired from active life as a business man, but he has ever continued solicitous of the city's welfare. In 1884 he read before the Board of Trade a paper on public parks,

impressions gathered during a recent trip through Europe; the result was an agitation which resulted in placing Paterson in possession of two fine parks. Mr. Crosby's residence on Broadway is one of the landmarks of the city; although now situated in the very heart of Paterson, the spot where it stands was when he purchased it and began the erection of the building, a cornfield. Its architecture was different from that of any of the houses which had been erected in the city and people came many miles to see the structure in which Mr. Crosby proposed to live.

ANDREW DERRON.—The ancestors of Col. Derron on the male side are the deRomes of French Flanders, who settled near Manchester, England, early in 1600, and subsequently in Montreal and Quebec, Canada. For more than 200 years members of the family were in the military service of Great Britain, notably in the Guards, Artillery, &c. One of his great grandfathers was one of Wolfe's grenadiers at the taking of Quebec. His father's grandfather was a volunteer under Lord Elliott at the great siege of Gibraltar; his father was a volunteer from the Guards to a fighting line regiment, and saw much active service. On the mother's side the stock was pure Yorkshire, Anglo-Saxon sturdy, industrial yeomanry of the most industrial county in England.

Col. Andrew Derron was born on Nov. 30, 1817, while his father was in the military service of the British government. His parents were Richard and Mary (Winders) Derron, the former of whom was born near Manchester, England, and the latter at Leeds. Richard Derron passed his life in the service of his country, spending a portion of the time in the army and at other times in the civil branch of the service.

Col. Derron was the second of the six children who grew to the years of maturity. His earliest recollections extend back to the year 1820 or 1821, when his father was stationed on the Isle of Malta, where important fortifications were being constructed. He remembers also having resided on the Isle of Corfu, and on that of Zante, famous for the beauty and splendor of its gardens. When six years of age he resided on the island of Cephalonia, at Argostoli, where he received his earliest instructions at a private school, and also special lessons in writing at the military clerk's office of the department. Here also he received moral and religious instruction from Rev. Dr. Kennedy and wife, missionaries of the English church at whose house he was often accustomed to meet Lord Byron, who was on the island training his silver-bespangled Sultans for his descent on Greece. In 1824 he was taken to England and attended a private school at Plymouth for some months, and subsequently received instruction at the grammar school of the same place. He next attended the grammar school attached to St. John's church, Glasgow, Scotland, and after that resided at different points in Ireland, and finally at Londonderry, where his father was

stationed in the civil service, and where he attended Creighton's grammar school, situated on the Wall above Governor Walker's testimonial. For three years thereafter he was instructed by a private tutor in connection with his brothers James and John, the former of whom is an architect and major of the Victoria Rifles in New Zealand, where the family finally located, and where both Richard Derron and his wife died.

After leaving Londonderry in 1831, Col. Derron went to Deal, England, where he studied higher mathematics with a friend—a branch of science in which he took great delight—it being his intention to fit himself for the profession of a civil and military engineer. He left Deal for the United States in August, 1836, and arriving in New York entered George Hayward's lithographic office in Nassau street, being an adept in drawing and coloring. In November, 1836, he was sent to Paterson to assist C. S. Van Wagoner, the civil engineer, to lay out and prepare maps of the city and vicinity. He made the first map of Passaic City also, for John Lloyd, an old resident of that place. In March, 1837, for the purpose of obtaining a practical knowledge of architecture, he apprenticed himself to a carpenter and builder in Paterson, and after three years was placed in charge of the business. In 1841 he began business on his own account in Paterson, and carried on one of the largest building enterprises in the State until the breaking out of the war in 1861, when, owing to his early military education and his admitted executive ability, he was chosen chairman of the war committee to raise troops, and succeeded in filling the several quotas of soldiers without the necessity of a draft, in one instance within three weeks. In 1862 when President Lincoln called for "300,000 men and 300,000 more," making 600,000 in all, a draft was ordered if the quota was not filled by volunteers. Col. Derron by energetic appeals to the patriotism of the people, seconded by his active personal exertions, succeeded in raising the quota for Paterson within three days. Failing in his efforts to have Passaic County soldiers commanded by Passaic men, it was arranged to have a regiment formed composed of five companies from Paterson and five from the Southern section of New Jersey, of which he was unanimously elected colonel. He was mustered into the service of the United States on Sept. 26, 1862. In a few days he had the regiment—the Twenty-fifth New Jersey Infantry—in perfect order and discipline, and proceeded to the seat of war in October following. On arriving at Washington he was appointed to command a brigade of Vermont, Massachusetts and New Jersey troops; but expressing a desire to do duty with his own regiment, many of whom had been induced to enlist by him, he resumed his duty as colonel. The regiment performed valuable service in the field, and participated in a number of important engagements. At the battle of Frederick'sburg, after the day was really lost, the regiment, with Col. Derron at its head, was the only one to advance to the enemy's works at the time, and the night being dark was controlled by the whistle-calls of its leader

alone. Throughout the entire service in the field Col. Derron earned the warm approval and indorsement of his superior officers, and performed his duties in a soldierly and successful manner. His engineering talents came into active play upon the occasion of the attack of Longstreet upon Suffolk, Va., in 1863, when within eight hours roads were built and bridges constructed over Broer's Creek under his supervision and direction, preventing a detour of five miles and bringing the troops on the Nansemon river into close and rapid communication with each other and with Suffolk, contributing essentially to the successful termination of the siege.

After the expiration of the regular term of service, Col. Derron returned to Paterson, expecting to rejoin the army with his regiment reorganized as veterans; but he found his private business affairs in such a disastrous condition that it was necessary for him to remain at home and look after the interests of his family. Within three years he restored his business, paid all indebtedness, and employed from four to five hundred men. For years he had one of the largest building enterprises in the country, and many of the manufacturing, public and private buildings in Paterson were erected by him, including such structures as the Dale, Arkwright, Empire, Waverly and Franklin mills. In many of the factories of the city, after the adoption of the tariff provisions of 1842, he designed and built the machinery with the assistance of expert mechanics. He was the first in the United States to make complete sectional buildings that could be built in one place and transported to another and put up, and received a bronze medal from the American Institute Fair in 1862 for his mechanical genius, and in 1872 both a silver and special gold medal from the New Jersey State Fair at Waverly. In 1870, having acquired a handsome competency, he retired from active business and established the Derron Building Company, putting in seventy-five thousand dollars of his capital and adding more from time to time. The corporate enterprise was at first very successful, but owing to the approaching business depression, signs of which had already begun to appear, it met with subsequent disasters, and finally collapsed. Even at this critical time Col. Derron did not hesitate to take of his private means to liquidate the indebtedness of the concern. He was subsequently invited to go to Caracas, Venezuela, where he established large construction shops on the American system, and filled the position of supervisor and architect for nearly four years. He returned in 1876, and is now with his son, Andrew Derron, Jr., in business as supervising architects in Paterson.

Besides his success as a mechanical engineer and as a commanding officer of brave soldiers in the field, Col. Derron has been since his first residence in Paterson, one of its most active and useful public men, and has been closely identified with many of the improvements and institutions of the city. He was instrumental in establishing People's Park on Madison avenue, and in developing other sections of the city. Upon the first organization of

the municipal government of Paterson, he was elected alderman from the West ward, and took a prominent part in perfecting the city government. He drew most of the ordinances, and his services were especially valuable in the arranging and correcting of street grades and lines. He was elected to serve a second term in the Board from the same ward. In 1853 he was chosen President of the City Council of Paterson as an independent candidate, a position that was equivalent to Mayor, and in which only two others had preceded him, viz.: Judge Philemon Dickerson and Charles Danforth. During his administration of municipal affairs, taxes were light, expenses small, and the debt of the city not only reduced, but a balance left in the treasury. In the spring he was appointed the first President of the Board of Education and Superintendent of Public Schools. He was the founder, organizer and developer of the present Free Public School System in Paterson, giving it the highest tone and perfecting the system. He remained with the Board of Education for five years, (1854-55-56-57-58,) and so thorough were the public schools that private schools could not be sustained against them. Col. Derrom has also been actively connected with other local institutions of Paterson: was the first vice president of the savings bank and of the Passaic water company. He was married in 1842 to Elizabeth Vreeland, a representative of some of the first settlers of Paterson. The children have been four in number, viz.: Andrew, James A., Mary L., wife of Casiano Santana, a banker of Caracas, Venezuela, and Elizabeth M. N. Derrom. Miss Jennie L. Derrom, is an adopted daughter, and occupies a cherished place in the household of which she forms a part.

GEORGE G. HALSTEAD, Director of the Board of Chosen Freeholders, was the son of William E. Halstead, one of the veterans of the war of the rebellion who died in 1863 in consequence of wounds received at the battle of Chancellorsville, Va. His mother came from Poughkeepsie, N. Y., and died in 1870. Mr. Halstead was born in Fair street, in this city, on the 12th of July, 1840, and first went to school to Miss Halstead in the old Congregational church in Market street. From there he went to the public school in Division street until the public school in Van Houten street was completed: here he attended until he had passed through the highest class. He was then only thirteen years of age and went to work in Grant's locomotive works, where he was employed four successive years. Then he took up the study of surveying and has devoted himself to that work ever since. Mr. Halstead was always a student, and few persons in Paterson know more of the details of the early history of their native home than does Mr. Halstead. For seven years he was judge of election in the first district of the Fourth Ward, and for five years a justice of the peace, his court being always given the preference by litigants who desired to have their cases settled without appeal to a higher tribunal. In 1883 he was

elected a member of the Board of Freeholders from the Fourth Ward and he has since served that ward in the Board. In 1888 he was the unanimous choice of the members of the Board for Director, a position to which he has since been re-elected and which he still holds.

JOHN T. HILTON was born in Oldham, Lancashire, England, though he is a thorough American in all his instincts. He came here when a mere child, in 1851, when Paterson had started out as a baby city, and he has been identified with the city, with a brief interval ever since. At the age of ten he left school to go to work for the late John Ryle in the old Gun mill, afterwards working in the Murray mill. After two or three years at silk, he tried stripping tobacco for Allen & Reynolds, but not liking that branch of industry, he tried steel wire making for the old style of hoop skirts, with Robert Crossland in Mulberry street. He drifted into the Paterson Intelligencer office in Van Houten street as a printer's "devil," but the proprietor, Joseph Warren, dying soon afterwards, the son, William Warren, and A. B. Woodruff formed a partnership and removed the paper to the Woodruff building in Main street and named the new issue the Independent Democrat. But the young "devil" made it too warm for the other occupants of the office, and after a narrow escape from firing the building they concluded they could publish the paper without his assistance. A winter at school followed the escapade, and in the spring following he concluded to try an apprenticeship as tinsmith, coppersmith and brass-smith with Nathaniel Lane of Van Houten street. But neither that nor storekeeping for Mr. Lane seemed to satisfy the taste of young Hilton. Another winter at school, where he wished to stay but his parents were too poor to keep him, and then he tried a cotton mill, carrying filling and bobbins in the old Duck mill in Boudinot, now Van Houten street. In the spring of 1860 he became a bound apprentice to Danforth & Cooke to learn the machine business, where he remained until he enlisted in September, 1862, in the company that was incorporated with the 25th N. J. Volunteers. After the battle of Fredericksburg, Mr. Hilton was promoted to mounted orderly and was detached at Brigade Headquarters where he remained until just before the regiment came home in 1863. On his return home he worked in New York and Jersey City at machine work, finishing his trade in the latter city in the Atlantic and Great Western Locomotive Works as a locomotive builder. For three winters while working in Jersey City, he attended the drawing and mathematical classes in Cooper Union, and laid the foundation for his present profession which he kept in view. He came back to Paterson in 1866, where his parents resided, and where he had retained a legal residence, to make silk spooling frames for Thomas Wrigley. Work becoming slack there, he drifted to Grant's Locomotive Works, but the pay not being equal to the work he considered he could do, he started to canvass for Greeley's "American Conflict," and

attended public school No. 1 all winter under the special instruction of principal Hosford. This ended his career with Paterson's industries. He had tried about all of them. In February, 1867, he engaged as an assistant with John H. Goetschius, civil engineer and surveyor, thus reaching the profession he had been drifting to. He was with Mr. Goetschius until the fall of 1869, when he engaged with Col. Derrom to map the east side of Paterson. In 1870 he engaged with the late A. A. Fonda, in whose service he continued until the summer of 1871, when he was offered a good position in Greenville, Hudson county, with H. E. Betts. In less than two months Col. Derrom induced Mr. Hilton to return to Paterson as surveyor of the Derrom Lumber, Land and Building Company. On Mr. Fonda's election as city surveyor in 1872, he engaged Mr. Hilton as first assistant, and to take charge of the city surveyor's office. He retained that position until 1878, when he was appointed engineer of the new sewer districts, and on Mr. Fonda's death a few months afterwards, he was appointed city surveyor. He held that office until the spring of 1884, when his unflinching opposition to "jobs" in his department, and city affairs, caused his defeat. The following extract from the Paterson Daily Press of April 30, 1884, sums up the cause and effect in this case:

"A great many people will regret to see Mr. Hilton no longer city surveyor. Mr. Hilton has been one of the finest city officers the city ever had. He is intelligent and understands his business in every particular. Under his administration the most important improvements in the city were carried through successfully, and the fact that Mr. Hilton had charge of a piece of work was a guarantee that it would be done in a thorough manner. He has displayed more backbone than any man who ever entered the City Hall, and it is just this supply of backbone that has lost him his position. He always insisted on contractors living up to the very letter of their contracts, and everything had to be done as Mr. Hilton thought the best interests of the city demanded it should be done. On this account he made a great many enemies, especially among the contractors and the furnishers of supplies to contractors, for it was very seldom that an important piece of work was undertaken but Mr. Hilton stopped the contractor on account of some violation of the provisions of the contract. Generally he was supported by the Committee on Streets and Sewers, but of late the committee has sided somewhat with the contractors, and in the construction of improvements materials have been used which Mr. Hilton did not approve of. The contractors made a combination against Mr. Hilton, and the result is that a most efficient public servant is ousted from an important office. Many persons regard this action on the part of the Aldermen as a very serious mistake, and some are very loud in their expressions of indignation."

At the time Mr. Hilton was appointed city surveyor, he formed a partnership with Leslie S. Menger, and on his retirement from the city surveyorship he continued the

business of the firm at their present stand, town clock building.

In 1888 the firm made a contract with the borough of Rutherford, Bergen county, to make a new assessment map of that municipality, which necessitated the survey of the whole place. They completed their contract in 1890 in a thorough and satisfactory manner, besides doing all the borough's engineering work during that period, and have lately made a contract to make grade maps for Union township, Bergen county. Mr. Hilton was one of the original Paterson Light Guard, and is the only officer of its successor—the First Battalion—that was an officer of that organization, except Chaplain Shaw. He was elected Second Lieutenant, Company B, in the Light Guard; was re-elected to that position on the organization being mustered into the State service, and resigned in 1883. He was appointed Adjutant of the First Battalion by Major Congdon, on Dec. 5, 1885, by the unanimous desire of all the captains, an honor which Mr. Hilton has always appreciated.

* * *

GARRIT A. HOBART, was born at Long Branch, N. J., on June 3, 1814. After a common school education he was sent to Rutgers College, where he graduated in 1833; shortly afterwards he entered the law office of Socrates Tuttle in Paterson and was admitted to the practice of the law in 1860; three years later he was licensed counselor at law. He was appointed City Counsel of Paterson in May, 1871; after holding the office for one year he was appointed counsel for the Board of Freeholders; in 1872 he was elected a member of the Assembly and declined a re-election to the office of Counsel to the county board. In 1873 he was again elected to the assembly and was chosen Speaker. In 1875 he declined a re-election to the assembly and in the following year was elected senator from Passaic county. In 1879 he was re-elected to the senate, this time by 1800 majority, the largest majority ever given a candidate in Passaic county up to that time. He was President of the Senate in 1881 and 1882. In 1874 he was appointed receiver of the New Jersey Midland railroad company and managed the affairs of the bankrupt concern so successfully that he paid a dividend to the unsecured creditors. When the company was reorganized he was unanimously elected president but resigned in a few months on account of more pressing engagements. He was also receiver of the Montclair railroad and the Jersey City and Albany railroad. In 1880 he was appointed receiver of the bankrupt First National Bank of Newark, and by the excellent judgment and energy by means of which he has attained to the distinguished position he holds in the nation in six months had its affairs substantially closed up and the depositors paid in full. In 1880 he was elected chairman of the Republican State Committee and has continued in that position ever since. In 1884 he was chosen member of the Republican National Committee and he has continued in that position ever

since. He is counsel for a large number of manufacturing and other corporations.

JOHN HOPPER, President Judge of the Orphans' Court and the Courts of General Quarter Sessions, the Special Quarter Sessions and the Common Pleas of Passaic county, is a descendant of a family who were among the oldest settlers in New Jersey. He was born on March 2, 1814, on the homestead farm of his father in the township of Lodi, in Bergen county, his parents being John J. and Maria (Terhune) Hopper. His father, who died in 1833, was a successful and enterprising farmer during his lifetime. His farm, comprising about three hundred acres, extended from Pollilly to Saddle River, and was occupied by his second son, Jacob, until his death in 1889. The subject of this sketch was the sixth of nine children. He was brought up on the homestead farm and received his early education at the old Washington Academy, Hackensack, and at the Lafayette Academy, of the same place. He was prepared for college under the Rev. John Croes, who conducted a classical school in Paterson, and by Thomas McGahagan, at the old academy at Bergen Town, now Hudson City. He entered the sophomore class of Rutgers College, New Brunswick, N. J., in 1830, and three years later was graduated from that institution, dividing the second honor of his class with Robert H. Pruyn, of Albany, subsequently minister to Japan. Since 1851 he has been one of the Trustees of Rutgers. After his graduation he entered upon the study of the law in the office of Governor Peter D. Vroom, in Somerville, N. J., and remained there two years. He completed the study of the law in the office of Elias D. B. Ogden, in Paterson, and on September 3, 1836, he was licensed by the Supreme Court at Trenton as an attorney at law and solicitor in Chancery. On February 27, 1840, he was licensed a counsellor at law. He had already, November 10, 1836, formed a partnership with his preceptor at Paterson and the firm of Ogden & Hopper did a successful business until the senior member of the firm was elevated to the bench of the Supreme Court. Mr. Hopper continued the business of the firm, and in 1850 took his son Robert L. into partnership with him. He has been called repeatedly to fill public positions and has discharged the duties of office with uniform fidelity and success. He was town counsel of Paterson from 1843 to 1847; surrogate of Passaic county for two successive terms, 1845-55; counsel to the Board of Chosen Freeholders from 1855 to 1861, and prosecutor of the pleas of Passaic County from 1863 to 1868, and again from 1871 to 1874. He served as State Senator from Passaic County from 1868 to 1871, and again from 1871 to 1877. In March, 1877, Governor Bedle appointed him Judge of the District Court of Paterson and he continued in that office until January 8, 1886, when he resigned that office and was appointed by Governor Abbett to the office he holds at present, which was then vacant. He was re-appointed by Governor Green, March 15, 1887, and on April 1, 1887,

for the full term of five years. He was appointed one of the advisory masters in Chancery in 1870, by Chancellor Runyon, and has held a number of other positions incidental to his profession.

Judge Hopper was married on June 16, 1840, to Mary A., daughter of the late Robert Inlay, a former merchant of Philadelphia. Fifty years afterwards he celebrated his golden wedding in the same house in which he had been married, and which had been his residence for half a century; the occasion was one which brought together a large number of the most prominent men of the State. Six of his children are living, viz.: John H., surviving partner of the silk manufacturing firm of Hopper & Scott; Robert Inlay, a partner of his father; Mary A., widow of Frank W. Potter, late United States Consul to Marseilles; James Burling, residing in Paterson, Miss Caroline Inlay, and Margaret Inlay, wife of John J. Boyd, now residing in Erie, Pa.

As might have been expected from his Dutch ancestry, he was one of the earliest members of the Holland Society of New York, having been chosen in 1886, and since 1889 has been one of the vice presidents of that society.

Before he was entitled to a vote, and ever since, he has been an active member of the Democratic party, serving on the State Committee many years, and has repeatedly represented New Jersey in the National Conventions of his party.

During the entire time that Judge Hopper was engaged in the practice of his profession he was recognized as a lawyer of ability, not only well read, but possessed of those mental faculties that conduce to the attainment of success. He was engaged in a large number of the most important cases tried in the state courts, and he brought to the discharge of his professional duties a certain urbanity of manner, combined with an incisiveness of thought and a clearness of exposition that almost uniformly led to decisions in favor of his clients. He has always been recognized as one of the foremost lawyers of the State. As a legislator he earned laurels which might well excite the envy of his fellows, and would undoubtedly have done so towards a person less popular than Senator Hopper. His elevation to the bench was hailed by all not only as a recognition of the eminent services he had rendered his party but as a just tribute to the man who had done so much towards maintaining the dignity of his profession by an ever straightforward course. As a judge of the county courts he has gained the respect of all and the gratitude especially of the younger members of the bar, whom he has ever ready by means of kind words and a voice to direct into the proper paths so familiar to himself.

ROBERT L. HOPPER, son of Judge John Hopper, was born in Paterson in 1845, graduated at Rutgers college in 1866, was admitted to the bar as an attorney at law in 1869 and licensed as a counsellor at law in 1872. He has practised law in Paterson since 1869 and has never held any

public office except that of Counsel to the Board of Freeholders of Passaic County to which office he was appointed in 1885, and which office he still holds.

MARINUS HOXSEY, a prominent architect of Paterson, was born in Goedereede, Holland, on December 22, 1848, and arrived in this country on October 7, 1854. At nine years of age he went to work in the Lodi print works and for eighteen years he worked as a carpenter in various parts of the country. In 1876 he went to South America, where he was employed for some time by Colonel Andrew Derrom and subsequently by the Ledgerwood Manufacturing Company of New York; he then started into business for himself and was very successful. He returned to Paterson in 1880, and having acquired a thorough knowledge of the trades of carpenter, millwright and steam fitter by practical application, he studied drawing in the evening schools of Paterson under Professor J. G. A. Meyer. He then opened an office for himself as an architect and has been eminently successful. Among the more prominent buildings he has designed and the erection of which he superintended are the following: The residences of Messrs. J. A. Van Winkle, E. Fifield, F. T. May, Frederick Harding and Joseph Savary; the Market street M. E. church parsonage, the O'Shea building on the corner of Market and Straight streets, the factory of the Paterson Ribbon Company, the hard rubber factory at Butler, N. J. His practical knowledge of every detail necessary in the erection of a building, has assisted him materially in his profession, and his business has increased to such an extent that he is compelled to employ several assistants although he personally looks after every part of all work entrusted to him.

THOMAS D. HOXSEY, who died in the spring of 1881, was for nearly half a century one of Paterson's most picturesque landmarks. At the time of his death there were few citizens who did not know, and none who had not heard of his striking personality. Tall and erect, strong morally and physically, energetic and quick, there are few lives about which more of local reminiscence clings or which were longer and more closely identified with the prosperity of the city.

The "General," as he was afterwards familiarly called from an office he held in the old State Militia, was the son of a Massachusetts farmer and first came to Paterson in the year 1833. He obtained employment as clerk in a dry goods store and, being simple and economical in his habits, he saved enough from his salary in a few years to start a business of his own. In this he made a comfortable fortune and about 1847 he left the dry goods business and engaged in cotton manufacturing. In this, however, he was not successful and in 1850 he failed. Meanwhile he had been preparing himself for the profession in which he was afterward to make a name and he devoted himself

exclusively to the practice of the law, politics and real estate speculation. His old friends still tell many stories of his pertinacity and pugnacity in legal contests. He had a penchant for taking up cases which others had abandoned and was never more in his element than when fighting some monopolistic corporation.

From the beginning of his career General Hoxsey always took a warm interest in politics and his outspoken expressions of his opinions on all occasions made him many friends as well as some enemies. First a Whig, he became disgusted with that party's attitude on the slavery question and in 1848 allied himself with the Free Soilers and was a prominent member of the Buffalo convention. That was the commencement of the Republican party and the General predicted at the time that a party had been born which would rule the country for years. In 1849 he was elected to the Assembly on a Temperance platform with Democratic support and in 1850 he was re-elected. In 1852 he was elected to the State Senate by the Democrats, and, carrying the issue of the campaign to a successful conclusion he became the father of the ten hour law in New Jersey. During the Fremont campaign he came out as a Republican and was an active and influential member of that party up till 1870 when he joined the Greenbackers and became their candidate for Governor of the state, receiving over 5,000 votes. In 1880 he ran again but the improvement in the times had affected the Greenback showing and he received a smaller vote.

For a number of years in the 60's he was County Clerk of Passaic County and after that he was U. S. Register in Bankruptcy.

Socially the General diffused about him the very essence of good fellowship, while his home was the center of a genial constant hospitality that knew no bounds. In all that he undertook he made and maintained a reputation for probity, intrepidity, manliness and magnanimity not always parts of so positive and forceful a nature. Throughout his life he was the friend of laboring men and of his fellow citizens, regarding them not as mere factors in a political contest but as brothers with opinions to be regarded and rights to be enforced; and second only to his patriotic love of his country was his pride in the town of his residence and his interest in all its public improvements.

Rugged and erratic, gentle and tender, fierce and aggressive, genial and courteous; the very contradictions of his character combined to make "a man" in whose death the public sustained a loss.

THOMAS FRANKLIN HOXSEY was born at Paterson, March 5th, 1841, and is the eldest son of the late Thomas D. Hoxsey.

After securing a good education he took up the study of civil engineering, a profession which has stood him in good stead ever since. His health failing him as he was about to start in his chosen profession, he started in 1860 for a trip across the plains to the then newly discovered mining

regions of Colorado and returned home in the fall of 1861 not much benefited by his trip. In 1862 he married and removed to a farm in Preakness where he lived till 1866, when he began business as a contractor by building the upper reservoir of the Passaic Water Company and laying the pipes under the bed of the Passaic River. Here his strong characteristics which have made a success of his life showed themselves. His courage, perseverance and his fertility of resource soon showed themselves, and enabled him to carry a work which would have daunted a less courageous man. His next work of any large character was the building of the Midland Railway from Hawthorne to Hackensack in 1870-71-72. Mr. Hoxsey like many others took large amounts of the stock of the railway in payment for the work done, and during the panic of 1872 and 1873 saw the earnings of his lifetime swept away; the stock having become valueless, and carried with it all his other accumulations.

With indomitable courage he started again and was soon on the way to success. His first wife having died in 1874, he married again in 1876. In 1886 and 1887 he became manager for what was known as the "Water Syndicate," and here again his force of character combined with a keen judgment of human nature enabled him to buy up immense tracts of land in Northern New Jersey, from whence the water supply of Newark will soon be drawn. Mr. Hoxsey still continues to aid in the management of the work in building reservoirs and all other work of the East Jersey Water Company, as well as carrying on a large and successful contract business.

Personally Mr. Hoxsey is a genial, whole-souled and pleasant man of kindly nature; he does many acts of unostentatious character in aiding the poor. In politics he is a staunch Republican, and one whose advice is often sought for by the leaders of his party.

JAMES JACKSON, the president of the Second National Bank of Paterson, was born here in 1841, and is the only one of the four bank presidents of this city who can properly lay claim to the distinction of being "to the manor born." His early education was received here, and he attended the State Law School at Poughkeepsie, N. Y., for two years, but abandoned further study in that direction, preferring a commercial career as suited to his tastes, and was for a number of years with the New Jersey Locomotive and Machine Co., of which his father was the founder and for years the president. He then went to the Idaho Iron Company, of Paterson, as treasurer, and two years later sold out his stock to the purchasers of the concern, the Passaic Rolling Mill Company. In 1864 when the Jackson family disposed of their interests in the New Jersey Locomotive & Machine Company to the Grants his father purchased the stock of the old Passaic County National Bank, and Mr. Jackson, the subject of this sketch, joined his father in the management of that institution, and was successively bookkeeper, teller and cashier. After the

death of his father it was decided to increase the capital of the bank, and with this end in view a number of the best known, reliable and successful business men of the city were elected to the direction of the newly organized institution, the name being changed by a special act of Congress to "Second National Bank." Mr. Benjamin Buckley was the first President under the reorganization, and Mr. Jackson the first cashier. Mr. Buckley resigned in 1881, and Mr. Jackson was elected to succeed him, and through successive years has been re-elected to the position which he still holds. Mr. Jackson has in a great measure directed the policy of this institution, which has been steadily and rapidly growing in public favor, the liberal, and at the same time conservative course, earning the confidence of the community. The recent improvements in its already commodious quarters by the addition of a handsome and well appointed directors' room, and a new and ornamental front, betokens the success which the bank has achieved under its efficient management. Mr. Jackson has on several occasions been selected by the courts to take charge of estates, these delicate and responsible duties, involving great care and discriminating judgment, having in every instance been faithfully and successfully administered. He is president of the Gould Company of New York city, one of the leading upholstery hardware houses of the country, and is prominently identified with manufacturing and other enterprises in this city. Many friends of Mr. Jackson have frequently importuned him to become a candidate for office, but he has invariably declined, preferring the modest retirement of private life. The wide and varied experience of Mr. Jackson in commercial affairs eminently fits him for the responsible position which he so ably fills, and the citizens of Paterson, especially the business public, are to be congratulated that their banking interests are directed by such able, conservative and reliable men.

JOHN FRANCIS KERR.—Mr. Kerr, a son of Mr. Hugh Kerr, of Paterson, N. J., was born at Scranton, Pa., April 30th, 1857, and is a lawyer by profession. He has lived in Paterson since he was about two years old. While Mr. Kerr does a general law business he makes a specialty of patent law and has his offices in the Paterson National Bank on Market street. He was educated at Seton Hall College, N. J., from which he graduated in June, 1876. On July 5th, 1876, he entered the law office of the late H. A. Williams (ex-Senator of Passaic County) as a law student. He was admitted to the bar of New Jersey at the November term, 1876, as an attorney, and three years later as a counselor. His services as a political speaker have always been sought for, and in every campaign since 1876 he has advocated the cause of Democracy. In November, 1880, he was elected a member of the Legislature of New Jersey from the Second District of Passaic County. The district, composed of the Second and Seventh Wards of the City of Paterson and the Township of Little Falls,

was a close one, and against a strong and popular opponent it was a hot though friendly contest, and Mr. Kerr received a plurality of 65 votes over the Republican candidate. During the session of the Legislature of 1860 he served on some of the most important committees, viz.: Judiciary, Bill Revision, Elections and the Joint Committee on Ballot Reform. On the floor he earned for himself the reputation of a good debater. He had never before that held any political office.

CHARLES M. KING, Surrogate of Passaic County, was born in this city on August 30, 1819. He attended Public School No. 5, and subsequently the Adelphe Military Institute at New Milford, Conn. He then learned the trade of machinist, but in 1871 he became a clerk in the Surrogate's office and served during the two terms of Surrogate Isaac Van Wagoner. In 1883, when Mr. Henry McDaniels was Surrogate, Mr. King was appointed Deputy Surrogate, being the first to hold that position in this county. In 1885 he was the Republican nominee for Surrogate and was elected by a large majority, his popularity being so great that the Democrats made no nomination against him.

JAMES W. MCKEE was born in Hoboken, N. J., on October 24, 1810, and his parents removed to Paterson when he was but a little over two weeks old. Here he passed his childhood and received his education. At an early age he evinced a musical talent which when subsequently developed gave him a widespread reputation as a tenor and resulted in his connection with a number of the foremost musical organizations which have traveled through this country. His first professional appearance was made in Brooklyn, N. Y., where he scored an instantaneous success which resulted in his engagement with Hooley & Hawkshurst's combination. Then he became a member of Josh Hart's company, in which Hartigan and Hart first made their reputation. Subsequently he joined the Berger Sisters and Sol Smith Russell organization and his sweet and powerful tenor won unstinted applause from audiences and the press all over the country, and it is also pleasing to note that his pecuniary reward was liberal. Among the most celebrated of his songs was "Over the Hills to the Poor House," written for him by Mr. George L. Catlin, at present United States consul to Zurich. Having grown tired of the stage Mr. McKee went into business in Paterson where his genialty and many sterling qualities made him deservedly popular. In 1882 he entered the political arena and was elected a member of the Board of Chosen Freeholders; in the following year he was chosen Director. In the fall of 1884 he was nominated for sheriff on the Republican ticket and elected by 2300 majority, the largest majority Passaic county ever gave any candidate. He has been frequently spoken of since in connection with other offices but has persistently

declined, preferring to follow his business as funeral director in which he engaged at the expiration of his term of office as sheriff. He has two sons, one a rising young lawyer and the other associated in business with himself. That Mr. McKee is one of the most popular men in the county need not be told; the people declared that emphatically when he ran for office. He enjoys the esteem of everybody and his position and reputation have been earned by his own efforts.

LESLIE S. MENGLER, a civil engineer and surveyor, was born in the city of New York on January 1, 1818. He obtained his early education in the public schools of the metropolis, graduating with the highest honors from school No. 35 in West Thirteenth street. After a course in the Free Academy, now the Free College of New York, he evinced a liking for engineering and entered the employ of John Roach & Son, of the Etna Iron Works, and remained there two years under the instruction of the late Erastus W. Smith, the consulting engineer of the firm. For some time after this he was employed by the Quintard Iron Works, but he soon found that indoor employment did not agree with him. After a severe illness he removed from New York to Newfoundland, Morris county, N. J., and there became a member of the engineering corps of the New Jersey Midland railroad company. He was subsequently transferred from that division of the road to Paterson, to which place he removed in 1860. He continued in the employ of the railroad company until the fall of 1871 when he entered the office of the late A. A. Fonda, City Surveyor of Paterson. He remained with Mr. Fonda until the latter's death in 1877 when he associated himself with Mr. John T. Hilton and formed the firm of Hilton & Menger. While in Mr. Fonda's employ he was entrusted with a good deal of difficult work; his natural talents and the experience he had gained were made use of by the city of Paterson which employed him for nine years as engineer of the sewer districts. He mapped out a large portion of the present sewer system of the city, and his work has been of inestimable value to both the city and the property owners. Among the more prominent works he had charge of as civil engineer and surveyor are the new reservoir of the Passaic Water Company, the spur of the New York, Susquehanna & Western railroad company, proposed water basins for the East Jersey Water Company and the grounds of the Northern New Jersey Fair Association.

WILLIAM NELSON is a lawyer of Paterson with a special fondness for difficult cases, especially those involving research into the history of the law and into the history of land titles in Passaic county. Probably no lawyer in New Jersey has drafted as many of the existing laws of the State. His first important effort of that kind was the drafting of the city charter of Paterson, in 1871, which was entirely his work, and which was so broadly and elastically

framed that it has met the requirements of the city with very little change for twenty years. Hundreds of other statutes relating to State, County and municipal administration, and to subjects of the widest variety, have been drawn by him, and they have been so perspicuously and skilfully framed that in few instances have the courts been invoked to interpret them, and in those cases their constitutionality has been invariably sustained. This class of work has been very useful to him in his practice, making him constantly familiar with the changes in the laws. He is counsel for a number of corporations and estates.

Mr. Nelson has always taken a great interest in politics, and in August, 1805, when but eighteen years of age, he made, alone, a tour of Passaic county, for the purpose of organizing Republican clubs. For many years thereafter he took a very active part in the campaigns of his party, being secretary of the county committee for many years, subsequently a member of the committee, and in other ways influential in the party management. In April, 1868, when but a few weeks more than twenty-one years of age, he was elected a member of the Board of Education from the Second ward, and re-elected in 1869 for two years. During his three years of service in that body no member was more active and indefatigable than he in developing and improving our public school system, for which work he was specially fitted, not only by education but by experience as a teacher, having taught in county schools at South Orange and Connecticut Farms in 1864 and 1865, and in a large German-English school in Newark in 1864, when but seventeen years old. In 1876 he was one of the official reporters of the Republican National Convention at Cincinnati, and was Recording Secretary of the Republican National Convention at Chicago in 1888, and was the first officer of that convention to announce to General Harrison the next day, at Indianapolis, his nomination for the Presidency. Of late years his increasing practice has constrained him to take a less active part than formerly in politics, but his influence and counsel are still in request in city, county, district and state.

In addition to attending to his large and growing practice, Mr. Nelson finds time to fulfil the exacting duties of Clerk of the Board of Chosen Freeholders of the County of Passaic, an office he has filled since 1871, by annual election, and except two or three times, by the unanimous vote of the Board, so useful has he made himself to the members, who always find him prompt, attentive and obliging. His knowledge of county affairs, by reason of his long connection with the Board and his constant study of legislation affecting counties, is of great service to the Freeholders.

He is also a Director of the Paterson Mutual Building and Loan Association, with which he has been connected since its organization in 1878. He is a Trustee and an Elder of the First Presbyterian church, and is an active member of the Board of Trade. He has served for several years as a member of the Advisory Board of Managers of the Paterson General Hospital, and has been one of the

most active members of the finance committee which has raised nearly \$10,000 for a new hospital, and is a member of the building committee charged with the erection of the contemplated structure, now under way. He is a trustee of the Pennington Methodist Episcopal Seminary located at Pennington, N. J.

When these multifarious duties are out of the way, which is accomplished by unintermitting application, untiring industry, and systematic arrangement of his business, Mr. Nelson seeks relaxation in literary work, to which end, as well as for the gratification of his tastes in that direction, he has fitted up at his attractive residence, No. 288 Broadway (which is pictured on another page), a handsome library, where are massed together nearly 3,000 volumes in all departments of literature, of all times and in many languages, besides which he has 4,000 or 5,000 more in other parts of his house, making altogether one of the largest and most valuable private libraries in New Jersey, especially rich in works on American, particularly New Jersey, history, on Mormonism, occult science, and out-of-the-way literature, some interesting specimens of incunabula, printed as early as 1471, and a very large collection of manuscripts and unique documents and autographs of persons distinguished in literature and history, the accumulation of years, and the gatherings of his travels in America, Canada and Europe. Mr. Nelson is Corresponding Secretary of the New Jersey Historical Society, and is one of the editors of the New Jersey Archives, published under the direction of that Society. He is a member of the New York Genealogical and Biographical Society, of the American Archaeological and Numismatic Society, of the Medico-Legal Society of New York, of the Congrès Internationale des Americanistes, and of other literary and scientific societies. He has managed to find time to publish a number of legal, historical and biographical monographs, some of which have attained a wide reputation. He has the largest collection of material extant for a history of Paterson, which it is expected that he will some day publish.

FLORIAN OBORSKI was born in Warsaw, Poland, on April 20, 1840. He graduated from the college of his native place, where he also received his first musical education. Early in life he evinced a taste for music and took part first as alto and subsequently as baritone in a number of oratorios and cantatas rendered in his native city. Having devoted a great deal of time to the study of the piano and organ, he was made the organist of a large musical organization and was subsequently appointed accompanist in the Warsaw Musical Society. While acting in this capacity his polonaise for grand orchestra was selected as a part of the programme of a concert given under the direction of the celebrated Moniuszko. Having completed his musical education he came to this country in 1872, and after giving a few concerts in New York and Brooklyn accepted the directorship of St. Cecilia's Society.

In May, 1874, he was appointed organist of the First Presbyterian church of Paterson, succeeding Mr. Percy Goetschius. Mr. Oborski's advent to Paterson was very fortunate for the interests of music in this city. When he arrived here little had been done in the field of music; few concerts or musical entertainments worthy of note had been given, and it soon became apparent that Paterson needed some such person as Mr. Oborski. His ability and talents were recognized at once and he became the center of everything that was new or classic in music. The impetus thus given to music resulted in the formation of a number of musical organizations, with all of which Mr. Oborski was more or less intimately connected. Paterson had obtained importance in the manufacturing and commercial world and it now came to the front as a music-loving community. The influence of Mr. Oborski can hardly be overestimated. He cultivated the public taste and by giving renditions of well known musical compositions instilled that love of classic music which has made Paterson audiences ever partial to everything superior in the line of music. He was the conductor of the German Quartette Club and the Swiss society, the "Gructli Maennerchor," and with these two associations twice took second prizes in the inter-state competitions of the singing societies held annually in New York. In 1874 he accepted the position of director of the Paterson Musical Union, recognized for many years as the leading musical society in Paterson. Under his direction the oratorio "Christus" with orchestra and chorus, was rendered for the first time in Paterson. The society gave a long series of public concerts and rehearsals, many of them for charitable objects, the programmes including Mendelssohn's opera "Loveley," Gounod's St. Cecilia Mass and other performances, which attracted not only the general public of Paterson but many music-loving persons from other cities. The Paterson Musical Union furnished the chorus and some of the solo parts for the Minnie Hank opera company when that organization rendered a scene from Wagner's "Lohengrin" in Paterson; the work of the society received the highest compliments from the distinguished prima donna. Mr. Oborski resigned as director of the Paterson Musical Union in 1885. For some years he was conductor of the Paterson Choral Society, the Boys' Musical Club and the Paterson Glee Club. In 1887 he accepted the position of director of the Paterson Philharmonic Society, an organization composed of prominent young men; under his able leadership he soon brought this society to a standard of perfection equalled by no previous organization of its kind in Paterson. Mr. Oborski has had charge of the music rendered at every public demonstration of importance since his advent in Paterson, at the Centennial concert in 1876, the centennial celebration of the Grand Lodge of Masons of New Jersey, and the public obsequies of Presidents Garfield and Grant.

ARTHUR BRIAN PEARCE was born in the year 1845, at Stockwell, a suburb of London, and came to this country at an early age. He engaged in business in New York City for a short time prior to settling in Paterson. He was first employed in the drawing office of the New Jersey Locomotive and Machine Company, afterwards the Grant Locomotive Works, and, attracting the attention of Mr. D. B. Grant, who then managed the works, was offered and accepted a position in his office, where he remained until the failure of the works in 1874. He was then employed by Receiver Pierson, and at the re-organization Mr. Grant made him Assistant Superintendent, which position he held until he resigned in May, 1876. He then associated himself with Mr. James Johnston who had severed his connection with the Paterson Iron Company, and bought the old Union Bolt Works. He assisted in changing the entire character of these works from a manufactory of bolts, etc., to a foundry, machine shop and bridge works, where for many years were turned out some of the largest castings and forgings in the State. Some of the principal contracts which were successfully carried out by these works were furnishing the iron work for the stairways, etc., for the Stevens' building in Wall street, New York, and the large apartment house on the corner of East 18th street and 4th avenue, New York, erected by Edward Matthews. The greenhouse and conservatory and iron building about 600 feet long and 45 feet high for Mr. Jay Gould at Irvington, N. Y., was built at these works and erected by them; also the iron work for the pier of the Iron Steamboat Company. Many of the road bridges in Passaic County, and some for Central America were built at the Union Bolt Works. Complications arising out of the failure of Grant & Ward, and the change in the officers of the New York, Lake Erie and Western Railroad in 1884, with which company he had large transactions, compelled Mr. Pearce, who was then president of the works, to apply for a receiver. He was then employed as manager of the Coatesville Iron Works, Coatesville, Pa. He soon afterwards formed a partnership with Thomas Rawson for the manufacture and repairing of screen plates used in paper and pulp mills. In this business he has been very successful, with the assistance of his partner building up one of the largest concerns in this line in the country.

In politics he is an active Republican; he was employed by the Board of Aldermen as clerk to the committee appointed to codify the ordinances of the city, a work which had not previously been undertaken. He was offered and refused a nomination for the assembly. He was a candidate for Commissioner of Public Instruction in the Seventh Ward in 1876, and although the usual majority against the Republican ticket is about 350 he was beaten by only 21. Removing to the 4th Ward he was elected a member of the Board of Education in 1883, and was made President of the Board of Education in the following year. He was re-elected in 1886 and is now serving his second term. He was appointed clerk to the Commissioners for the adjustment of arrangements of taxes in 1888, which position he

now holds. He was appointed by President Harrison Supervisor of the Census for the First District of New Jersey, comprising the counties of Passaic, Bergen, Morris, Sussex, Warren and Essex, with a population estimated approximately at 523,500, and at its completion was congratulated by the Superintendent of Census as being one among the first supervisors to complete his work.

CHARLES R. PELGRAM was born near Cologne in Germany, and received a good education in the schools of his native land. His father was a physician. After having spent a number of years in travel on the continent, Mr. Pelgram came to this country, arriving here shortly after the war of the secession. He was employed in a silk mill and having thoroughly mastered the business was made Superintendent for William Strange & Co. Mr. Pelgram was a man of great force of character and energy and he soon recognized the fact that he could accumulate a fortune and make a mark for himself. He accordingly founded the firm of Pelgram & Meyer, which in an incredibly short space of time became one of the foremost silk manufacturing firms in the country. The masterly management of Mr. Pelgram, who had the entire charge of the mills, was soon recognized by his competitors but he was ever far in the lead. He devoted himself assiduously to his business and saw as the result of his efforts the erection and equipment of one mill after another, until the firm was among the largest manufacturers in the country. He erected for himself a magnificent residence at Riverside, but unfortunately was not permitted to indulge long in the enjoyment of it. His death occurred on November 15, 1887. In business Mr. Pelgram was the soul of honesty and energy and he was ever ready to recognize merit wherever he found it. Socially he was pleasant and genial in disposition, and his death caused pangs of regret in many hearts. Mr. Pelgram was only forty-three years of age at the time of his death, and it was certainly to be regretted that a career so promising and so fraught with benefits to a great many, should have been cut short in the prime of its existence.

THOMAS WILLIAM RANDALL, counsellor-at-law, was born in Buckinghamshire, England, about twenty miles from London, and within two miles of the historic Windsor castle, on June 24th, 1853, and is a descendant of some of the most substantial and oldest families in that locality, both on the paternal and maternal side. He arrived in the United States with his parents in June, 1866, and resided with them in Bergen County, and later at Hawthorne, in this county, until he entered upon the study of his profession. Mr. Randall first studied in the office of Judge Hopper, in Paterson, and afterwards with Messrs. Pennington & DeWitt, of Newark, and also attended the Columbia Law School, in New York. He was admitted to the New Jersey bar at the June term of the Supreme

Court, in 1877, and, after spending some time abroad, returned to this city and settled down to the practice of law, in which he has been actively engaged ever since. Mr. Randall is a Republican in politics, but takes no active part therein, and has never held any political office. He has been a member of the Board of Trustees of the Second Presbyterian church for a number of years past, and a director of the Paterson Mutual Building and Loan Association since its organization in 1878. He is also one of the managers of the Passaic County Bar Association, and a member of the Board of Trade. In his profession he confines himself to office practice, owing to an exceedingly delicate constitution which renders him unable to endure great excitement or nervous strain. He is counsel for many families, estates and corporations, and is well established as a trusted and careful legal adviser. He is an extensive and versatile reader, and his tastes and habits are quiet, literary and refined. In 1879, he married Miss Jennie S. Perry, a well-known and highly esteemed teacher in the public schools of this city, and at one time principal of School No. 2.

JOHN REYNOLDS, President of the Paterson Savings Institution, was born in the north of Ireland on March 11th, 1826. He came to this country when an infant one year old. The family resided in Rockland county, N. Y., and Bergen county, N. J., and came to Paterson about 1833. After a common school education, at an early age he went with Stephen Allen to learn the trade of tobacco, snuff and segar manufacturer, which he followed until 1852, when he entered into partnership with Stephen and John Allen, under the firm name of Allen, Reynolds & Co. He was afterwards associated with these gentlemen in the firm of Alphus S. Allen, and continued in this firm in business until 1872, when the business was sold to Allen & Dunning. In 1850 and 1860 Mr. Reynolds served as a member of the Board of Education, and 1865 he was elected from the Fourth Ward as a member of the Board of Aldermen. While a member of this body, Mr. Reynolds served with distinction and credit to himself and the city as a member of many important committees, and, together with the late Hannah Van Winkle, acted as a committee to negotiate for the purchase of the present pothouse farm, in which the city received a fine piece of property at a very reasonable price. In 1864 Mr. Reynolds was elected a member of the first board of directors of the First National Bank, and is one of the three original members who are still acting as such. He is at present vice-president of that institution, having been elected in January in 1883. He was one of the incorporators of the Paterson Savings Institution, and was appointed surveyor and appraiser of said institution in 1872, and on January 14th, 1873, he was elected vice-president in connection with his other office. He was elected president January 11th, 1876, a position which he has ever since occupied. In 1872 he was elected president of the Paterson Gaslight Company, a position which

he still holds, and up to 1886 he was for many years the president of the Acquackanonk Water Company. Mr. Reynolds owes his present position in life to his own endeavors, his uniformly courteous manners, and his determination at all times to be upright and liberal. Principally through his endeavors the Paterson Savings Institution has attained the high rank it holds among the banking institutions of the state, and the many depositors of the institution testify to the confidence they repose in his ability. Mr. Reynolds has on a number of occasions been selected to manage large estates and trust funds and he has always acquitted himself to the satisfaction of all interested. No man ranks higher in the estimation of the public or counts his friends in larger numbers than Mr. John Reynolds.

FRANCIS SCOTT was born in Paterson on August 28, 1857, and was educated in the private schools of Paterson and at Yale College. He was admitted to the bar in the November term, 1878, of the Supreme Court, and became a counsellor at law in 1881. He was City Counsel of Paterson during 1885 and 1886, and was made Judge of the Paterson District Court in 1888 for a term of five years.

MR. C. C. SHELBY was born in Strasburg, France, September 20th, 1841. He came to this country with his parents when but a youth, and settled in Marietta, Washington County, Ohio, in an Indian hut. At the beginning of the war of the rebellion Mr. Shelby enlisted in an Ohio regiment, but was not taken on account of ill health. He was then engaged as porter in a hotel at Marietta. In 1862 the patriotic citizens of Marietta raised an American and rebel flag on Front street, and Mr. Shelby, who was on his way to the depot, saw that the bystanders were greatly excited over the two flags. Some wished to see the American flag remain aloft, and others the rebel flag; but Shelby who had a great deal of respect for his country, ascended the flag staff and pulled down the rebel flag; this caused considerable indignation among the Confederates, and he was chased about the city. After a lively run he escaped to the wharf where he was put aboard a steamer by his cousin, Mr. H. Best, and sent to Pittsburg, Pa. After reaching Pittsburg, Mr. Shelby concluded to go to New York City; but having only enough money to carry him to Harrisburg, was compelled to work his way as best he could for the remainder of the journey. After extreme difficulties he reached New York and immediately applied for a position in the Erie depot (the Erie at that time occupying a portion of the Pennsylvania Railroad), and was employed in the railroad yard washing cars, etc., at 50 cents per day. He worked diligently for one year, and then enlisted in the 21st New Jersey regiment, but was rejected again. Mr. Shelby did not like the idea of being rejected as a soldier, so repaired to Hackensack, N. J., and enlisted in the 22d New Jersey regiment and was ac-

cepted. After serving his time as a soldier, he returned to New York, and again took up his vocation washing cars; he was soon promoted to oiling car wheels, then to brakeman, then to baggage master, and finally to conductor on the Newark branch. He was the first conductor on that branch. He was soon transferred to the Hackensack branch of the Erie, where he remained for a very short time.

As an inventor Mr. Shelby has but a few equals, as he has invented many valuable contrivances and obtained patents on them. His first invention was a folding barrow, his second a railroad switch, the next a hat fastener, a hose supporter, and to day Mr. Shelby is the inventor of one hundred and three different patents which have all been duly filed in the patent office at Washington, D. C. After several years hard labor, Mr. Shelby desired to go into business for himself, but his capital was limited, and he was forced to borrow the money to start with. He finally obtained enough money, and started a place in 6th avenue, New York, in a hallway. He was so encouraged over his first day's proceeds, which amounted to twenty dollars, that his success seemed to be pictured before him, and he forged ahead, and to-day he has retired from business, having amassed a considerable sum of money from his various inventions. Mr. Shelby is at present manager of the Silk City Garter Manufacturing Company, which is located in Van Houten street.

THOMAS C. SIMONSON, JR., was born in the City of New York, but before he was a year old his parents removed to Paterson, and he has resided here ever since. In 1874 he entered the office of Hon. G. A. Hobart as a law student, and in June of 1877, he was admitted to the bar of New Jersey as an attorney; in June, 1880, after the expiration of the necessary three years of additional study, he was admitted as a counsellor at law of the State. Mr. Simonson is also an attorney and counsellor at law of the State of New York, and at times practices law there. In 1887 he was appointed City Counsel of Paterson for one year, and in 1888 was re-appointed to the same office for a period of five years. He is an active member of the Republican party. Mr. Simonson has a fine law practice, and that combined with his office as City Counsel, makes him an extremely busy man. He is still a young man, being 30 years of age.

WILLIAM M. SMITH, at present Clerk of Passaic county, was born in Paterson, on June 14, 1854; he was a son of Mr. Samuel Smith, elsewhere mentioned as one of the pioneer manufacturers of the city. He attended the public schools and was under the instruction of Rev. George B. Day and Rev. J. L. Hunt; in 1874 he graduated from the College of New Jersey at Princeton. He studied law in the office of Mr. William Pennington and was admitted to the bar in 1877. He was married in December,

1870, to Miss Flora L., daughter of Mr. Robert S. Hughes, of Paterson. In 1881 he was nominated as candidate for County Clerk by the Republican county convention, and such was his popularity that the Democrats did not consider it worth while to make any nomination against him. In 1886 he was again nominated and this time elected by a plurality of 2857 votes, larger than any ever given in Passaic County.

SOCRATES TUTTLE was born in Colebrook, Coos county, New Hampshire, on the 10th day of November, 1810. His parents were in straitened circumstances and his boyhood was that of millions whose names are never heard farther than a few miles from the places of their birth: he was surrounded by privations and poverty, and his education was received at the village school which he attended three months in the year until he had attained his twenty-first year. His father was a blacksmith, and young Socrates spent most of his time about the fire of the forge. He worked at the anvil and forge until he became an expert blacksmith, but he never had a liking for the business. With a few dollars in his pocket, but with a capital of pluck and energy worth more than thousands of dollars, he left his home and came to New Jersey, where he first settled down in Blue Bell, Monmouth county. Here he took charge of a subscription pay-school, which he taught from December, 1841, to March, 1844. In March, 1844, he removed to Paterson and became a law student in the office of James Speer. Here he remained about a year until Speer was appointed one of the judges of the Court of Errors and Appeals, when Mr. Tuttle entered the office of Benjamin W. Vandervoort. Here he concluded his studies and in April, 1848, he was admitted to the bar and appointed a solicitor in Chancery. He obtained his license as counsellor-at-law in 1851.

Mr. Tuttle was thrice married. His first wife was Jane, daughter of Baltus and Esther Winters, of this city, to whom he was married May 23, 1848; she died on June 14, 1849, leaving an only daughter, Jane, who subsequently married Hon. G. A. Hobart, of this city. In November, 1852, Mr. Tuttle married Mary, the oldest daughter of William Dickey, of this city; she died on August 25, 1890. The children resulting from this union were:—Charles M.; William D.; Minnie, who died in infancy; Elizabeth Murray, who died at the age of three years; Lillian, who died at seven; and Augustus Hobart. Mr. Tuttle subsequently married Elizabeth A., widow of Dr. P. S. Weller, and she survives him.

Mr. Tuttle was most prominent before the people as a lawyer, and as such he was known to nearly every resident of Passaic county. He did more legal work for many years than any other lawyer in the city, and although he was always very busy he never neglected a case. His clients knew that they could depend on him under all circumstances. His extensive knowledge of law enabled him to grasp the important points of a case at once, and it was

principally due to this attainment that he was enabled to attend to as much business as he did. His natural wit also stood him in good stead, and frequently assisted him in winning a case by calling the attention of jurors to points which without flashes of humor would have remained in obscurity. Mr. Tuttle had a copious flow of language, and as a pleader to a jury he could not be excelled in the county. He was earnest in every case he undertook and made his client's cause his own. On the street and everywhere he argued for his clients, and although this may not have been productive of any visible good in some cases, in others it certainly assisted him for it created a feeling in favor of the side he represented.

His career as an office holder was brief, but it was distinguished by all the traits of character which rendered him so popular. In 1851 and 1852 he was City Clerk of Paterson, and in 1855 he represented the East Ward in the Board of Freeholders, and he was Counsel to this Board in the year 1853, and from 1865 to 1871 inclusive. In 1858 he was elected School Commissioner from the East Ward, and again (to fill a vacancy) in 1859. In 1861 and 1862 he represented the Second District of this county in the Legislature; those were trying times, but Mr. Tuttle was always found on the side of loyalty to the Union and justice. In 1871 and 1872 he was Mayor of the City of Paterson, and as such he did all in his power to maintain the high standing of Paterson and improve its condition. As a politician Mr. Tuttle was first a Whig and subsequently an ardent Republican. He was one of those honest and earnest men who thought that the Republican party was the best safeguard for an honest administration, and he talked Republican politics whether there was a campaign or not. He had the history of his party at his fingers' ends, and he could argue for hours and never recede an inch from the position that the Republican party had always done what was the best for the country, and that although its measures were frequently abused at the time of inception, they invariably proved the best for the nation. He was a man who was ever ready to do more than his share towards the success of the Republican ticket, and he never looked for reward or emolument for his labors, for he thought he was doing nothing but his duty to his country. He declined scores of offers of office; he was satisfied with the honors which had been heaped upon him, and although he was foremost in society and at the bar he preferred to be called plain "Mr. Tuttle."

His character was almost without fault, and he was a man who had no enemies. In his case the plain truth is the highest eulogium that can be pronounced, and this is indeed a rarity. He was a good Christian and attended services regularly in the First Presbyterian church in this city, of which church he was a trustee for many years. He presided at the first meeting held for the organization of the new Broadway Presbyterian church, the Church of the Redeemer, but he was not subsequently identified with this movement; he preferred to remain in the old church, in which he had worshipped so many years. Mr.

Tuttle was ever ready to assist the needy to the extent of his power: his purse and his advice were ever at the disposal of the poor. He was one of the directors of the Old Ladies' Home and took a lively interest in that institution, as he did in fact in all the charitable institutions in Paterson. In society Mr. Tuttle was the same as at the bar or elsewhere, ready for a discussion and full of humor and wit. Frequently when he had met with misfortune his friends expected to find him downcast, but although the blast of adversity might at times bow down the head the natural elasticity of character always placed it erect again. His imperturbable good nature won for him many friends, and Mr. Tuttle was always welcome, no matter where he might go. He had the pride of an honest man, the pride of having built up for himself a name that would be an honor to his children; he frequently referred to the trials of his youth and laughed at the obstacles he had overcome. His death, which was due to angina pectoris, occurred on February 12, 1885.

FRANK VAN CLEVE was born in the city of New York on January 24, 1853, and obtained his education in the public schools of the metropolis and the Free Academy, at present the Free College of the City of New York, graduating with honor at the latter institution. In 1866 he removed with his parents to Corona, a village near Hackensack, in Bergen county, N. J. Here he was ticket agent for the New York and New Jersey railroad company and made himself useful on his father's farm. In June, 1875, he removed to Paterson where he entered the law office of Mr. John C. Paulison; he was admitted to the practice of the law in 1876 and Mr. Paulison, dying shortly afterwards Mr. Van Cleve succeeded to his practice which he has since considerably increased. In April, 1880, he was appointed Judge of the District Court by Governor Green and served until January of the year following when a legislature differing from him in politics declined to reappoint him. There are a number of sterling qualifications which have made Mr. Van Cleve one of the most popular men in the city. He is possessed of a genial good humor which is unruffled under the most adverse circumstances and this combined with his ready wit not only cultivates his conversation but also assists him materially in the exercise of his profession. He is gifted with legal acumen and a persuasive style of pleading which win him many cases and clients, and all who have ever had any dealings with him know that he can be depended upon under all circumstances.

ARTHUR A. VAN HORN was born at Baltimore, Md., on April 20, 1855. His parents who were originally from New York, returned to New York city in 1850 and resided there until the spring of 1862 when they came to Paterson and took up their residence here. Since that time the subject of this sketch has continued to reside here.

He commenced reading law in this city with the late Henry S. Drury in 1871 and was admitted to practice at the bar as an Attorney in 1878, and as a Counsellor in 1881. He was subsequently admitted to practice as an Attorney and Counsellor in the State of New York. In 1880 he was appointed a United States Commissioner, and he is the only person in Passaic county who has the honor to hold that appointment. He is interested in the growth and prosperity of our city as he owns much valuable real property in different sections of the same. He is a vestryman of the P. E. Church of the Holy Communion with which church he has been identified since about the time of its organization. He is a large stockholder and an officer of the Essex Button Company, and one of the incorporators and a director of the Colt Land Company. He has never held any political office.

JOHN J. WARREN was born in Paterson fifty-seven years ago and has resided in this city all his life. After receiving the best education which the schools of the city afforded he was employed in the works of the New Jersey Locomotive Company where he became an expert machinist and engineer. After having risen to the position of superintendent he quit the employ of the company for the purpose of accepting a similar position in the works of Todd & Raftery. He held this position in 1869 when the nature of the work brought on a severe illness from which he did not recover until early in the year following. His physician advised him that a return to work in the shops would certainly bring on a recurrence of the malady and his friends urged him to become a candidate for the position of Recorder or police justice of the city of Paterson. Before this time Mr. Warren had been elected to the Board of Education and had also served two years in the Board of Aldermen. He at first laughed at the idea of accepting an office whose emoluments were only a trifle compared to the salary he had commanded in the shops but through the influence of his friends the meagre salary attached to the office was increased and Mr. Warren was induced to accept the position. He was annually re-elected for a long time, holding the office for fifteen years. On November 21, 1882, on the organization of the present Board of Health, Mr. Warren was elected secretary and he still holds that office, having been re-elected every year without opposition. In 1883 he was elected a member of the Board of Education from the Seventh Ward and he is at present a member of that Board having been re-elected at the expiration of every term. On the first of April, 1884, he took his seat as a judge of the courts of Passaic county, having been appointed to that honorable position by Governor Green. Judge Warren is in all respects a self-made man and the many offices he has filled and still fills were tendered to him on account of his sterling qualifications and not because he sought them.

HENRY A. WILLIAMS was born in Paris, France, June 6th, 1821, while his parents were temporarily residing there. His father, William Williams, of London, a gentleman of means, shortly afterwards returned to England and from thence sailed for America with his family. Henry A. Williams studied law in Paterson with the late Daniel S. Barkalow, and was admitted as an attorney in 1840, and as a counsellor at law in 1852. He was then a resident of Paterson and continued so up to the time of his death. Mr. Williams was appointed Brigade Judge Advocate of the Passaic Brigade of the Militia of New Jersey, by Gov. Olden, July 19, 1861. He however took no active part during the war in the field, for he was elected Mayor of the city of Paterson in 1862, 1863, 1864 and 1865, both parties uniting in doing him that honor in 1862 and 1863. He was again elected in 1867. It was during the exciting times of the war that he made his greatest reputation. In the darkest days of the rebellion, when Paterson was threatened with a draft, he took the leading part in filling up the city's quota of volunteers. He rendered the city invaluable service by his prudent and careful advice, freely given; he contributed freely from his purse also, more than once nearly impoverishing himself and making himself personally liable for large sums of money.

In 1868 he was appointed Prosecutor of the Pleas, and for three years he filled that position with a conscientiousness and energy that have never been surpassed. He resigned to accept the office of State Senator to which position he had been elected by the Republican party by the largest majority ever given up to that time. In the Senate he was an earnest and influential worker and gave much time and labor to perfecting the laws in reference to the taxation of railroads in cities, as well as to other public legislation. In 1871 he was appointed City Counsel of Paterson and re-appointed in 1875, 1876, 1877 and 1878. He was also counsel for many large corporations, including the First National Bank, the Paterson Savings Institution, the Paterson Gas Light Company, the Cedar Lawn Cemetery Company, and many others. He was also a director in these corporations.

Few men were ever better fitted for the legal profession than Mr. Williams; as a close student he was thoroughly versed in all the intricacies of the law, and with this he combined a legal acumen and an earnestness and effectiveness of pleading which made him a formidable adversary. It can be truly said that no man ever possessed the confidence of his clients and the confidence and respect of the people who have so frequently honored him as did Mr. Williams.

Mr. Williams died November 7th, 1888, while attending service in the Church of the Redeemer of which he was

an elder and president of the Board of Trustees. He left surviving him his wife Mary Z., daughter of the late ex-Judge Samuel A. Van Samt, and six children; William H. and Assemblyman Robert Williams, lawyers of this city; Dr. Joseph W. Williams; and three daughters, Annie, Lavina S. and Matilda B., wife of Rev. A. W. Hand.

GEORGE WURTS was born at Easton, Pa., September 13, 1820. From very early life he devoted himself to literature. His first journalistic work was done for the Newark Advertiser in 1861, just at the beginning of the civil war. After a short time spent on the reporters' staff of the Advertiser he accepted an engagement as reporter on the Newark Mercury, and shortly afterwards became its editor. While engaged on this paper he corresponded for the New York Times and Evening Post. On the starting of the Brooklyn Union he became associate editor of that paper, retaining the position until February 1, 1865, when he left it to assume the duties of editor of the Paterson Daily and Weekly Press. It is somewhat of a notable coincidence that the Brooklyn Union and the Paterson Press were both started on the same day and in almost precisely the same way—by an association of Union men. Mr. Wurts has remained editor of the Press from the date mentioned to the present time, and by means of his ability and energy, seconded by an enthusiasm for every cause that had for its object the welfare of the country, the paper has risen to occupy a commanding position among the journals of the country. To him the editing of a paper is more than making money, the latter always being subservient to the duties which he recognizes his position imposes upon him. He is one of the most zealous of Republicans, and his editorial work has been effective in every campaign, but he has never permitted partisanship to disturb his sound judgment, and his voice was always among the first to warn his party when the leaders swerved from the principles to which Republicanism owes its success. His style is clear and incisive, but when occasion calls for it he is not found wanting in the use of metaphor and elegant rhetoric. In social life his pleasant manners diffuse about him an air of geniality which is always attractive. His two sons, William L. R. and George Herbert, assist him in his editorial work. In former years he contributed considerably to the leading periodicals of the country, but of late he has confined himself more closely to the work of editing the Press. He was president of the New Jersey Editorial Association in 1870, and during the legislative sessions of 1880, 1881 and 1882 he was secretary of the New Jersey Senate. At the institution of the Free Public Library of Paterson he was appointed one of the trustees, and has continued in that position ever since, his excellent literary taste and wide knowledge of books making him a very useful member of that body.

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